

Appendix C
RAGS Part D Tables

Table 1 Series	Selection of Exposure Pathways
Table 2 Series	Occurrence, Distribution, and Selection of Chemicals of Potential Concern
Table 3 Series	Medium-Specific Exposure Point Concentration Summary
Table 4 Series	Values Used for Daily Intake Calculations
Table 5 Series	Non-Cancer Toxicity Data
Table 6 Series	Cancer Toxicity Data
Table 7 Series	Calculation of Non-Cancer Hazards and Calculation of Cancer Risks
Table 8 Series	Summary of Receptor Risks and Hazards for COPCs
Table 9 Series	Risk Assessment Summary

Table 1 Series
Selection of Exposure Pathways

TABLE 1.1
SELECTION OF EXPOSURE PATHWAYS FOR SURFACE SOIL
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/ Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Surface Soil	Surface Soil	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No current commercial activites in Exposure Unit 1 or Exposure Unit 2.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	Anecdotal evidence suggests that adolescent trespasser may visit the Site.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
	Air	Air	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current commercial activites in Exposure Unit 1 or Exposure Unit 2.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Anecdotal evidence suggests that adolescent trespasser may visit the Site.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
Future	Surface Soil	Surface Soil	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for future commercial activites in Exposure Unit 1 or Exposure Unit 2.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for short-term construction activites, presumptive remedy.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Qual	Exposure assumed to be same as current, presumptive remedy.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	U.S. EPA Region 4 requirement ^a .
	Air	Air	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for future commercial activites in Exposure Unit 1 or Exposure Unit 2.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for short-term construction activites, presumptive remedy.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 1/ Exposure Unit 2	Qual	Exposure assumed to be same as current, presumptive remedy.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	U.S. EPA Region 4 requirement ^a .

^a U.S. EPA Region 4 requires that residential development be considered during the Baseline Risk Assessment. However, the Site is located within the "Airport Environs Area" and the zoning ordinance precludes future development of the Aqua-Tech property for residential use.

TABLE 1.2
SELECTION OF EXPOSURE PATHWAYS FOR SUBSURFACE SOIL
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/ Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 or Exposure Unit 2 location (e.g., utility trench)	Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No current construction activites.
		Air	Any Exposure Unit 1 or Exposure Unit 2 location (e.g., utility trench)	Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current construction activites.
Future	Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 or Exposure Unit 2 location (e.g., utility trench)	Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for short-term construction activites, presumptive remedy.
		Air	Any Exposure Unit 1 or Exposure Unit 2 location (e.g., utility trench)	Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for short-term construction activites, presumptive remedy.

TABLE 1.3
SELECTION OF EXPOSURE PATHWAYS FOR SEDIMENTS
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/ Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Sediment	Sediment	Any Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	Typical commercial exposure not expected in areas having sediment impacts.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 2	Quant	Access restrictions are not in place in all areas of Exposure Unit 2.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No current residential exposures; trespasser/visitor is intended to be protective of nearby residents.
	Air	Air	Any Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 2	None	Typical commercial exposure not expected in areas having sediment impacts.
				Construction Worker	Adult	Inhalation	Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 2	Quant	Access restrictions are not in place in all areas of Exposure Unit 2.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 2	None	No current residential exposures; trespasser/visitor is intended to be protective of nearby residents.
Future	Sediment	Sediment	Any Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	Typical commercial exposure not expected in areas having sediment impacts.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	Quant	Potential exists for short-term construction activites.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 2	Qual	Exposure assumed to be same as current.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No residential exposures are expected; trespasser/visitor is intended to be protective of nearby residents.
	Air	Air	Any Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 2	None	Typical commercial exposure not expected in areas having sediment impacts.
				Construction Worker	Adult	Inhalation	Exposure Unit 2	Quant	Potential exists for short-term construction activites.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 2	Qual	Exposure assumed to be same as current.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 2	None	No residential exposures are expected; trespasser/visitor is intended to be protective of nearby residents.

TABLE 1.4
SELECTION OF EXPOSURE PATHWAYS FOR GROUNDWATER
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/ Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Groundwater	Groundwater	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	Community-supplied water - a few reported groundwater wells in Exposure Unit 2.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No current construction activities, depth to water precludes most construction activities intersecting groundwater.
				Other Worker (Irrigation Maintenance)	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	No current irrigation maintenance activities, but the presumptive remedy in Exposure Unit 1 suggests that this exposure be considered in the future use timeframe.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	Community-supplied water - a few reported groundwater wells in Exposure Unit 2.
	Air	Any Exposure Unit 1 or Exposure Unit 2 location (groundwater-to-ambient air)		Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	Transfer from groundwater through the soil column to ambient air is not expected to be a significant exposure pathway.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current construction activities, depth to water precludes most construction activities intersecting groundwater.
		Any Exposure Unit 1 or Exposure Unit 2 location (groundwater sprayed on ground surface)		Other Worker (Irrigation Maintenance)	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current irrigation maintenance activities, but the presumptive remedy in Exposure Unit 1 suggests that this exposure be considered in the future use timeframe.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	Transfer from groundwater through the soil column to ambient air is not expected to be a significant exposure pathway.
Future	Groundwater	Groundwater	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	Community-supplied water - a few reported groundwater wells in Exposure Unit 2.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	None	Depth to water precludes most construction activities intersecting groundwater.
				Other Worker (Irrigation Maint)	Adult	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for long-term irrigation/maintenance activities.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	U.S. EPA Region 4 requirement ^a .
	Air	Any Exposure Unit 1 or Exposure Unit 2 location (groundwater-to-ambient air)		Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	Transfer from groundwater through the soil column to ambient air is not expected to be a significant exposure pathway.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	Depth to water precludes most construction activities intersecting groundwater.
		Any Exposure Unit 1 or Exposure Unit 2 location (groundwater sprayed on ground surface)		Other Worker (Irrigation Maintenance)	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for long-term irrigation/maintenance activities.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 1/ Exposure Unit 2	Quant	U.S. EPA Region 4 requirement ^a .

^a U.S. EPA Region 4 requires that residential development be considered during the Baseline Risk Assessment. However, the Site is located within the "Airport Environs Area" and the zoning ordinance precludes future development of the Aqua-Tech property for residential use.

TABLE 1.5
SELECTION OF EXPOSURE PATHWAYS FOR SURFACE WATER
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Surface Water	Surface Water	Any Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	Typical commercial exposure not expected in areas having surface water impacts.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 2	Quant	Access restrictions are not in place in all areas of Exposure Unit 2.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
	Air	Air	Any Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 2	None	Typical commercial exposure not expected in areas having surface water impacts.
				Construction Worker	Adult	Inhalation	Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 2	Quant	Access restrictions are not in place in all areas of Exposure Unit 2.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
Future	Surface Water	Surface Water	Any Exposure Unit 2 location	Commercial Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	Typical commercial exposure not expected in areas having surface water impacts.
				Construction Worker	Adult	Combined (Ingestion/Dermal)	Exposure Unit 2	None	Assumed that construction activities in areas having surface water would involve diverting the surface water away from the construction site.
				Trespasser/Visitor	Adolescent	Combined (Ingestion/Dermal)	Exposure Unit 2	Qual	Exposure assumed to be same as current.
				Resident	Child/Adult/Aggregate	Combined (Ingestion/Dermal)	Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
	Air	Air	Any Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 2	None	Typical commercial exposure not expected in areas having surface water impacts.
				Construction Worker	Adult	Inhalation	Exposure Unit 2	None	Assumed that construction activities in areas having surface water would involve diverting the surface water away from the construction site.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 2	Qual	Exposure assumed to be same as current.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.

TABLE 1.6
SELECTION OF EXPOSURE PATHWAYS FOR LANDFILL GAS
AQUA-TECH SITE

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Exposure Unit 1/ Exposure Unit 2	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Landfill Gas	Air	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current commercial activites.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current construction activites.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Anecdotal evidence suggests that adolescent trespassers may visit the Site.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No residential exposures currently in Exposure Unit 1 or Exposure Unit 2, site is zoned commercial/industrial.
				Other Worker (Irrigation Maintenance)	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	None	No current irrigation activities.
Future	Landfill Gas	Air	Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Workers could potentially be in Exposure Unit 1 or Exposure Unit 2 five days/week.
				Construction Worker	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for short-term construction activites, presumptive remedy.
				Trespasser/Visitor	Adolescent	Inhalation	Exposure Unit 1/ Exposure Unit 2	Qual	Exposure assumed to be same as current, presumptive remedy.
				Resident	Child/Adult/Aggregate	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	U.S. EPA Region 4 requirement ^a .
				Other Worker (Irrigation Maintenance)	Adult	Inhalation	Exposure Unit 1/ Exposure Unit 2	Quant	Potential exists for long-term irrigation/maintenance activites.

^a U.S. EPA Region 4 requires that residential development be considered during the Baseline Risk Assessment. However, the Site is located within the "Airport Environs Area" and the zoning ordinance precludes future development of the Aqua-Tech property for residential use.

Table 2 Series

Occurrence, Distribution, and Selection of Chemicals of Potential Concern

TABLE 2.1a
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil
Exposure Point:	Exposure Unit 1

CAS Number	Chemical	Minimum Concentration (mg/kg)	(1) Minimum Qualifier	Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening	Background Value (mg/kg)	Screening (3) Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	(4) Rationale for Contaminant Deletion or Selection	
															(2)	
67-64-1	Acetone	0.2	J	3.9		509-06	2/68	0.003 - 0.084	3.9	N/A	160	NC			NO	BSL
309-00-2	Aldrin	0.0018		0.055		ERC-01	3/68	0.0018 - 0.11	0.055	N/A	0.029	C			YES	ASL
7429-90-5	Aluminum	8,140		84,900		505-04	69/69		84,900	54,000	7,600	NC			YES	ASL
7440-36-0	Antimony	2.8	BNW	15.3	N	501-04	11/65	2.1 - 2.8	15.3	0.575	3.1	NC			YES	ASL
53469-21-9	Aroclor-1242	0.2	P	0.34	P	AA-13	2/68	0.035 - 2.1	0.34	N/A	0.22	C			YES	ASL
12672-29-6	Aroclor-1248	0.3		0.30		601-02 B-1	1/1		0.3	N/A	0.22	C			YES	ASL
11097-69-1	Aroclor-1254	0.069		35		501-06	10/69	0.035 - 0.92	35	N/A	0.22	C			YES	ASL
7440-38-2	Arsenic	0.66	B	65.6	S	PCL-SA	46/69	0.63 - 1.6	65.6	7.8	0.39	C			YES	ASL
7440-39-3	Barium	38.2	B	3,300		501-03	69/69		3,300	96	540	NC			YES	ASL
100-52-7	Benzaldehyde	1.8		1.8		601-02 B-1	1/1		1.8	N/A	610	NC			NO	BSL
71-43-2	Benzene	0.0008	J	0.001	J	501-04	2/75	0.005 - 0.26	0.001	N/A	0.65	C			NO	BSL
56-55-3	Benzo(a)anthracene	0.078	J	0.37	J	509-04	2/68	0.34 - 9.6	0.37	N/A	0.62	C			YES	MCC
50-32-8	Benzo(a)pyrene	0.49	J	0.73	J	509-04	2/69	0.34 - 9.6	0.73	N/A	0.062	C			YES	ASL
205-99-2	Benzo(b)fluoranthene	0.58	J	1.1		509-04	2/69	0.34 - 9.6	1.1	N/A	0.62	C			YES	ASL
191-24-2	Benzo(g,h,i)perylene	0.4	J	0.40	J	601-02 B-1	1/1		0.4	N/A	5.6 (5)	NC			NO	BSL
207-08-9	Benzo(k)fluoranthene	0.41	J	0.41	J	509-04	1/68	0.34 - 9.6	0.41	N/A	6.2	C			YES	MCC
7440-41-7	Beryllium	1.1		2.7		501-03	21/69	0.56 - 1.4	2.7	0.97	15	NC			NO	BSL
58-89-9	BHC, gamma- (lindane)	0.002	P	0.14	P	ERC-01	4/68	0.0018 - 0.11	0.14	N/A	0.44	C			NO	BSL
92-52-4	Biphenyl, 1,1-	1.2	J	1.2	J	601-02 B-1	1/1		1.2	N/A	300	NC			NO	BSL
117-81-7	Bis(2-ethylhexyl)phthalate	0.12	J	120		501-09-S	32/69	0.28 - 1.4	120	N/A	35	C			YES	ASL
78-93-3	Butanone, 2-	0.002	J	10.5		503 B-3	4/75	0.001 - 1	10.5	N/A	730	NC			NO	BSL
85-68-7	Butylbenzylphthalate	0.19	J	2.4	J	501-06	10/69	0.34 - 9.6	2.4	N/A	1,200	NC			NO	BSL
7440-43-9	Cadmium	1.5		68.1		501-04	30/69	1.1 - 1.4	68.1	N/A	3.7	NC			YES	ASL
7440-70-2	Calcium	236	B	6,750		601-02	69/69		6,750	340	NF	NF			NO	NUT
75-15-0	Carbon disulfide	0.0004	J	0.0004	J	510-09	1/68	0.01 - 0.26	0.0004	N/A	36	NC			NO	BSL
NF	Chlordane, alpha-	0.0038	P	0.0038	P	AA-12	1/68	0.0018 - 0.11	0.0038	N/A	2 (5)	C			NO	BSL
NF	Chlordane, gamma-	0.0024		0.0057		AA-12	3/68	0.0018 - 0.11	0.0057	N/A	2 (5)	C			NO	BSL
108-90-7	Chlorobenzene	0.001	J	0.001	J	601-02	1/75	0.005 - 0.26	0.001	N/A	15	NC			NO	BSL
67-66-3	Chloroform	0.0007	J	0.002	J	501-04	2/68	0.01 - 0.26	0.002	N/A	0.24	C			NO	BSL
74-87-3	Chloromethane	0.02	JB	0.27		601-02 B-6	2/8	0.005 - 0.005	0.27	N/A	1 (5)	C			NO	BSL
7005-72-3	Chlorophenyl phenyl ether, 4-	1.6		1.6		601-02 B-1	1/1		1.6	N/A	12	NC			NO	BSL
16065-83-1	Chromium	10.5		339		501-04	69/69		339	47	23 (5)	NC			YES	ASL
218-01-9	Chrysene	0.092	J	0.43	J	509-04	2/69	0.34 - 9.6	0.43	N/A	62	C			YES	MCC
7440-48-4	Cobalt	12.8		47.2		601-09	51/69	10.6 - 13.5	47.2	3.3	470	NC			NO	BSL
7440-50-8	Copper	6	B	986		501-06	69/69		986	25	290	NC			YES	ASL
74-90-8	Cyanide	0.25	B	74.7	N	501-04	15/69	2.6 - 3.6	74.7	N/A	1.1	NC			YES	ASL
110-82-7	Cyclohexane	0.28	J	0.28	J	601-02 B-1	1/1		0.28	N/A	950	NC			NO	BSL
72-54-8	DDD, 4,4'-	0.0038	P	0.47	P	503	5/68	0.0035 - 0.21	0.47	N/A	2.4	C			NO	BSL
72-55-9	DDE, 4,4'-	0.0061	P	0.12		AA-05	11/68	0.0035 - 0.21	0.12	N/A	1.7	C			NO	BSL
50-29-3	DDT, 4,4'-	0.0058	P	1.4		503	19/68	0.0035 - 0.21	1.4	N/A	1.7	C			NO	BSL
84-74-2	Di-n-butylphthalate	0.046	J	8.6		ERC-01	16/69	0.057 - 7.3	8.6	N/A	610	NC			NO	BSL
117-84-0	Di-n-octylphthalate	0.32	J	26		501-04	6/69	0.34 - 9.6	26	N/A	120	NC			NO	BSL
75-34-3	Dichloroethane, 1,1-	0.014		0.03	J	601-02 B-1	3/75	0.005 - 0.057	0.03	N/A	59	NC			NO	BSL

TABLE 2.1a
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil
Exposure Point:	Exposure Unit 1

CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening	Background Value (mg/kg)	(2) Screening Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	(4) Rationale for Contaminant Deletion or Selection
107-06-2	Dichloroethane, 1,2-	0.015	B	0.015	B	601-02 B-1	1/1	0.015 - 0.005	0.015	N/A	0.35	C		NO	BSL
156-59-2	Dichloroethene, cis-1,2-	0.7		3.14		601-02 B-1	3/8	0.005 - 0.005	3.14	N/A	4.3	NC		NO	BSL
156-60-5	Dichloroethene, trans-1,2-	0.04		0.04		601-02 B-1	1/7	0.005 - 0.005	0.04	N/A	6.3	NC		NO	BSL
540-59-0	Dichloroethene (total), 1,2-	0.0005	J	0.047	J	501-09-S	7/67	0.01 - 0.017	0.047	N/A	4.3 (5)	NC		NO	BSL
78-87-5	Dichloropropane, 1,2-	0.015	J	0.015	J	501-09-S	1/67	0.01 - 0.017	0.015	N/A	0.35	C		NO	BSL
60-57-1	Diechlorin	0.0036		0.0036		AA-08	1/68	0.0035 - 0.21	0.0036	N/A	0.03	C		NO	BSL
84-66-2	Diethylphthalate	0.11	J	0.21	J	AA-08	2/68	0.34 - 9.6	0.21	N/A	4,900	NC		NO	BSL
131-11-3	Dimethylphthalate	4.3		4.3		601-02 B-1	1/1		4.3	N/A	61,100	NC		NO	BSL
121-14-2	Dinitrotoluene, 2,4-	0.89		0.89		505-S	1/68	0.34 - 9.6	0.89	N/A	12	NC		NO	BSL
NF	Endosulfan I	0.0018		0.0018		AA-08	1/68	0.0018 - 0.11	0.0018	N/A	37 (5)	NC		NO	BSL
NF	Endosulfan II	0.0036		0.0036		AA-08	1/64	0.0035 - 0.21	0.0036	N/A	37 (5)	NC		NO	BSL
1031-07-8	Endosulfan sulfate	0.0036		0.0036		AA-08	1/64	0.0035 - 0.21	0.0036	N/A	37 (5)	NC		NO	BSL
72-20-8	Endrin	0.0036		0.0036		AA-08	1/68	0.0035 - 0.21	0.0036	N/A	1.8	NC		NO	BSL
7421-93-4	Endrin aldehyde	0.0067		0.0067		AA-08	1/68	0.0035 - 0.21	0.0067	N/A	1.8 (5)	NC		NO	BSL
NF	Endrin ketone	0.0036		0.0036		AA-08	1/64	0.0035 - 0.21	0.0036	N/A	1.8 (5)	NC		NO	BSL
100-41-4	Ethylbenzene	0.002	J	0.67		601-02 B-1	8/75	0.005 - 0.017	0.67	N/A	150	NC		NO	BSL
206-44-0	Fluoranthene	0.098	J	1.3	J	501-06	8/69	0.34 - 9.6	1.3	N/A	230	NC		NO	BSL
76-44-8	Heptachlor	0.0018		0.05	P	601-02	5/68	0.0018 - 0.11	0.05	N/A	0.11	C		NO	BSL
1024-57-3	Heptachlor epoxide	0.0018		0.0018		AA-08	1/68	0.0018 - 0.11	0.0018	N/A	0.053	C		NO	BSL
591-78-6	Hexanone, 2-	0.0008	J	0.0008	J	509-05	1/68	0.01 - 1	0.0008	N/A	79	NC		NO	BSL
7439-89-6	Iron	8.080		56,300		505-01	69/69		56,300	36,000	2,300	NC		YES	ASL
98-82-8	Isopropylbenzene	0.15	J	0.15	J	601-02 B-1	1/1		0.15	N/A	16	NC		NO	BSL
7439-92-1	Lead	14.3		1,290	*	501-06	69/69		1,290	43	NF	NC		YES	NTX
7439-95-4	Magnesium	486	B	22,300		510-07	69/69		22,300	1,460	NF	NF		NO	NUT
7439-96-5	Manganese	36.5		1,240		501-06	69/69		1,240	102	180	NC		YES	ASL
7439-97-6	Mercury	0.13	*	73		501-03	50/69	0.11 - 0.14	72.6	0.19	2.3	NC		YES	ASL
108-10-1	Methyl-2-pentanone, 4-	0.19	J	0.19	J	601-02 B-1	1/1		0.19	N/A	79	NC		NO	BSL
75-09-2	Methylene chloride	0.001	J	0.005	J	601-02	5/75	0.001 - 0.26	0.005	N/A	8.9	C		NO	BSL
91-57-6	Methylnaphthalene, 2-	2.7	J	2.7	J	501-05	1/68	0.34 - 9.6	2.7	N/A	5.6 (5)	NC		NO	BSL
106-44-5	Methylphenol, 4-	1.2		4.7	J	501-09-S	2/69	0.34 - 8.5	4.7	N/A	31	NC		NO	BSL
91-20-3	Naphthalene	0.44	J	22		501-05	4/76	0.005 - 9.6	22	N/A	5.6	NC		YES	ASL
7440-02-0	Nickel	9.6		1,180		501-01	61/69	8.5 - 10.2	1,180	14	160	NC		YES	ASL
87-86-5	Pentachlorophenol	0.9		0.9		505-03	1/68	0.83 - 23	0.9	N/A	3	C		NO	BSL
85-01-8	Phenanthrene	0.056	J	1.7	J	501-06	6/69	0.34 - 9.6	1.7	N/A	5.6 (5)	NC		NO	BSL
108-95-2	Phenol	0.24	J	2.6	J	501-04	5/69	0.1 - 9.6	2.6	N/A	3,700	NC		NO	BSL
7440-09-7	Potassium	604	B	23,600		601-08	69/69		23,600	1,880	NF	NF		NO	NUT
129-00-0	Pyrene	0.093	J	1.8	J	501-06	8/69	0.34 - 9.6	1.8	N/A	230	NC		NO	BSL
7782-49-2	Selenium	0.88	B	0.88	B	601-02	1/69	0.56 - 0.85	0.88	0.575	39	NC		NO	BSL
7440-22-4	Silver	2.6		5.4		501-06	2/68	2.1 - 2.8	5.4	N/A	39	NC		NO	BSL
7440-23-5	Sodium	112	B	3,440		ERC-01	45/69	105 - 557	3,440	330	NF	NF		NO	NUT
100-42-5	Styrene	0.0009	J	0.0009	J	509-01	1/75	0.005 - 0.26	0.0009	N/A	460	NC		NO	BSL
79-34-5	Tetrachloroethane, 1,1,2,2-	0.004	J	0.025		601-05	5/75	0.005 - 0.26	0.025	N/A	0.38	C		NO	BSL
127-18-4	Tetrachloroethene	0.0005	J	25		601-02	22/75	0.001 - 0.017	25	N/A	0.38	C		YES	ASL

TABLE 2.1a
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil
Exposure Point:	Exposure Unit 1

CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening	Background Value (mg/kg)	Screening (3) Toxicity Value (mg/kg)	Potential ARAR/TBC	Potential ARAR/TBC	COPC Flag	Rationale for Contaminant Deletion or Selection
7446-18-6	Thallium	0.7	B	1.8		601-02 B-1	46/69	0.64 - 0.81	1.8	0.575	0.52	NC		YES	ASL
108-88-3	Toluene	0.0003	J	0.39	J	601-02	44/75	0.001 - 0.017	0.39	N/A	59	NC		NO	BSL
8001-35-2	Toxaphene	6.8		6.8		509-05	1/68	0.18 - 11	6.8	N/A	0.44	C		YES	ASL
120-82-1	Trichlorobenzene, 1,2,4-	0.042	J	2.4	J	601-02	4/76	0.005 - 9.6	2.4	N/A	65	NC		NO	BSL
71-55-6	Trichloroethane, 1,1,1-	0.0004	J	0.070		501-06	7/75	0.003 - 0.26	0.07	N/A	63	NC		NO	BSL
79-00-5	Trichloroethane, 1,1,2-	0.001	J	0.0010	J	501-04	2/67	0.01 - 0.057	0.001	N/A	0.84	C		NO	BSL
79-01-6	Trichloroethylene	0.0004	J	21.2		601-02 B-6	30/75	0.005 - 0.95	21.2	N/A	0.84	C		YES	ASL
7440-62-2	Vanadium	18		195		505-04	69/69		195	83	55	NC		YES	ASL
1330-20-7	Xylenes	0.0005	J	3.6		601-02 B-1	8/68	0.01 - 0.017	3.6	N/A	140	NC		NO	BSL
NF	Xylene, m&p-	0.35		0.94		601-02 B-6	3/7	0.01 - 0.01	0.94	N/A	140 (5)	NC		NO	BSL
95-47-6	Xylene, o-	0.18		0.74		601-02 B-6	2/7	0.005 - 0.005	0.74	N/A	140 (5)	NC		NO	BSL
7440-66-6	Zinc	22		957	*	601-05	69/69		957	46	2,300	NC		NO	BSL

(1)Minimum/maximum detected concentration.

(2)Background value is two times the mean concentration or one-half of the Practical Quantitation Limit (PQL)

for analytes that were below detection limits (BDL)

(3)November 22, 2000. Region IX PRG Table. Lower of the residential values at HI of 0.1 for noncarcinogenic effects (NC) and 1E-06 risk for carcinogenic effects (C). Lead screening value based on IEUBK model.

Not appropriate to adjust to HI of 0.1.

(4)Rationale Codes Selection Reason:

Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Supplemental Guidance to RAGS for Members of a Chemical Class (MCC)

Deletion Reason: Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5)The noted screening values are based on closely related surrogates as follows:

Phenanthrene based on Naphthalene

Benzo(g,h,i)perylene based on Naphthalene

Chromium based on chromium VI

4-Chlorophenyl phenyl ether based on pentabromodiphenyl ether

1,2-Dichloroethene (total) based on cis-1,2-Dichloroethene

2-Hexanone based on Methyl isobutyl ketone

2-Methylnaphthalene based on Naphthalene

Endosulfan I based on Endosulfan

Endosulfan II based on Endosulfan

Endosulfan sulfate based on Endosulfan

Endrin aldehyde based on Endrin

Endrin ketone based on Endrin

o, m, p-Xylene based on Xylene

Chlordane, alpha- based on Chlordane

Chlordane, gamma- based on Chlordane

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

J = Estimated Value

B = Analyte detected in associated method blank

P = Concentration difference between GC columns >25%

N = Spiked sample recovery not within control limits

W = Post digestion spike for Furnace AA analysis out of control limits

S = Value was determined by method of standard additions

* = Duplicated analysis not within control limit

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

TABLE 2.1b
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil
Exposure Point:	Exposure Unit 2

CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background Value (mg/kg)	(2) Screening Toxicity Value (mg/kg)	(3) Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	(4) Rationale Contaminant Deletion or Selection	
67-64-1	Acetone	0.01		0.089	B	AA16	2/11	0.004 - 0.014	0.089	N/A	160	NC			NO	BSL
7429-90-5	Aluminum	11,300	J	36,000		SS-4	11/11		36,000	54,000	7,600	NC			NO	BKG
7440-36-0	Antimony	1.2	JB	2.8	JB	SB-8/0-1	2/11	1.1 - 2.4	2.8	N/A	3.1	NC			NO	BSL
7440-38-2	Arsenic	2	B	5.5		SS-4	11/11		5.5	7.8	0.39	C			NO	BKG
7440-39-3	Barium	23.5	JB	196	J	SB-8/0-1	11/11		196	96	540	NC			NO	BSL
7440-41-7	Beryllium	0.34	B	1.9		SB-8/0-1	7/11	1.1 - 1.2	1.9	0.97	15	NC			NO	BSL
319-85-7	BHC, beta-	0.0022		0.0022		SS-3	1/11	0.0018 - 0.002	0.0022	N/A	0.32	C			NO	BSL
7440-70-2	Calcium	59		1370		SB-8/0-1	11/11		1,370	340	NF	NF			NO	NUT
16063-83-1	Chromium	8.2		28.8		AA17	11/11		28.8	47	23 (5)	NC			NO	BKG
7440-48-4	Cobalt	1.1	B	5.1		SB-8/0-1	7/11	10.8 - 12.1	5.1	3.3	470	NC			NO	BSL
7440-50-8	Copper	3.8		22.6	*	AA17	11/11		22.6	25	290	NC			NO	BKG
72-54-8	DDD, 4,4'-	0.0057		0.0057		SS-3	1/11	0.0035 - 0.004	0.0057	N/A	2.4	C			NO	BSL
72-55-9	DDE, 4,4'-	0.017		0.018		SS-3	2/11	0.0035 - 0.004	0.018	N/A	1.7	C			NO	BSL
50-29-3	DDT, 4,4'-	0.012		0.04		SS-3	2/11	0.0035 - 0.004	0.04	N/A	1.7	C			NO	BSL
7439-89-6	Iron	9,700		40,000		SS-3	11/11		40,000	36,000	2,300	NC			YES	ASL
7439-92-1	Lead	17.3	*	55.3	N	AA17	11/11		55.3	43	400	NC			NO	BSL
7439-95-4	Magnesium	340		2,680		SB-8/0-1	11/11		2,680	1,460	NF	NF			NO	NUT
7439-96-5	Manganese	23		328		AA18	11/11		328	102	180	NC			YES	ASL
7487-94-7	Mercury	0.12		0.51	*	AA17	2/11	0.11 - 0.12	0.51	0.19	2.3	NC			NO	BSL
7440-02-0	Nickel	2.5	B	11.6		AA17	8/11	8.6 - 8.9	11.6	14	160	NC			NO	BKG
7440-09-7	Potassium	340		2,100		SB-8/0-1	11/11		2,100	1,880	NF	NF			NO	NUT
7440-23-5	Sodium	51		220		SS-7	4/11	35 - 121	220	330	NF	NF			NO	NUT
7440-28-0	Thallium	1.2		1.2		SS-3	1/11	0.65 - 1.9	1.2	N/A	0.52	NC			YES	ASL
108-88-3	Toluene	0.0008	J	0.023		AA16	4/11	0.0011 - 0.011	0.023	N/A	59	NC			NO	BSL
7440-62-2	Vanadium	18.8	J	112		AA17	11/11		112	83	55	NC			YES	ASL
7440-66-6	Zinc	14		41.2		AA17	11/11		41.2	46	2,300	NC			NO	BKG

(1)Minimum/maximum detected concentration.

(2)Background value is two times the mean concentration or one-half of the Practical Quantitation Limit (PQL)

for analytes that were below detection limits (BDL)

(3)November 22, 2000. Region IX PRG Table. Lower of the residential values at HI of 0.1 for noncarcinogenic effects (NC) and

1E-06 risk for carcinogenic effects (C). Lead screening value based on IEUBK model.

Not appropriate to adjust to HI of 0.1.

(4)Rationale Codes Selection Reason: Toxicity Information Available (TX)
Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason: Background Levels (BKG)
Essential Nutrient (NUT)
Below Screening Level (BSL)

(5)The noted screening values are based on closely related surrogates as follows:

Chromium based on chromium VI

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

J = Estimated Value

B = Analyte detected in associated method blank

* = Duplicated analysis not within control limit

N = Spiked sample recovery not within control limits

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

TABLE 2.2a
OCCURRENCE, DISTRIBUTION AND SELECTION OF SUBSURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium: Exposure Point:		Future Subsurface Soil Subsurface Soil Exposure Unit 1													
CAS Number	Chemical	Minimum (1) Concentration (mg/kg)	Minimum Qualifier	Maximum (1) Concentration (mg/kg)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background (2) Value (mg/kg)	Screening (3) Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	Rationale for (4) Contaminant Deletion or Selection
67-64-1	Acetone	0.022		4.7	B	TS1-B-1	14/31	0.0067 - 54	4.7		620	NC		NO	BSL
98-86-2	Acetophenone	0.1	J	0.1	J	DIS-B-1	1/10	0.36 - 4	0.1		0.16	NC		NO	BSL
309-00-2	Aldrin	0.0078	P	0.0078	P	TS02-SP	1/16	0.0019 - 0.1	0.0078		0.15	C		NO	BSL
7429-90-5	Aluminum	14,600		72,100		501-09-B-09	21/21	72,100			167,700	NC		NO	BSL
120-12-7	Anthracene	0.064	J	0.12	J	IA-SP	2/28	0.36 - 8.1	0.12		39,000	NC		NO	BSL
7440-36-0	Antimony	1.6	B	7.5		601-02-B-5	5/6	1.3 - 1.3	7.5		82	NC		NO	BSL
53469-21-9	Aroclor-1242	0.07	P	19		DIS-SP	3/16	0.036 - 0.79	19		1	C		YES	ASL
12672-29-6	Aroclor-1248	0.17		0.81		IA-SP	2/20	0.036 - 2	0.81		1	C		YES	MCC
11097-69-1	Aroclor-1254	0.19		0.76		PCL-SP	2/20	0.036 - 2	0.76		1	C		YES	MCC
7440-38-2	Arsenic	0.91	BN	10.4		601-02-B-5	18/21	0.66 - 0.74	10.4		2.7	C		YES	ASL
7440-39-3	Barium	124		1,490	J	601-02-B-5	21/21		1,490		12,500	NC		NO	BSL
71-43-2	Benzene	0.002	J	0.74		DAR-B-2	5/85	0.005 - 54	0.74		1.5	C		NO	BSL
56-55-3	Benz(a)anthracene	0.46		1.9	J	DIS-SP	5/18	0.36 - 2.4	1.9		2.9	C		YES	MCC
50-32-8	Benz(a)pyrene	0.34	J	0.55	J	DUP02 (TS02-SP)	3/28	0.36 - 8.1	0.55		0.29	C		YES	ASL
205-99-2	Benz(b)fluoranthene	0.6		0.84		IA-SP	3/28	0.36 - 8.1	0.84		2.9	C		YES	MCC
191-24-2	Benz(g,h,i)perylene	0.62		0.62		IA-SP	1/28	0.36 - 8.1	0.62		19 (5)	NC		NO	BSL
207-08-9	Benz(k)fluoranthene	0.37	J	0.73	J	DUP02 (TS02-SP)	3/18	0.36 - 8.1	0.73		29	C		YES	MCC
7440-41-7	Beryllium	1.2	U	2.9		503-B-2	4/21	0.55 - 1.5	2.9		370	NC		NO	BSL
58-89-9	BHC, gamma- (lindane)	0.0052	j	0.0052	j	TS02-SP	1/16	0.0019 - 0.1	0.0052		2.9	C		NO	BSL
117-81-7	Bis(2-ethylhexyl)phthalate	0.14	J	22		DIS-SP	15/27	0.36 - 0.49	22		180	C		NO	BSL
78-93-3	Butanone, 2-	0.011	J	24.8		TS1-B-1	15/85	0.005 - 54	24.8		2,800	NC		NO	BSL
85-68-7	Butylbenzylphthalate	0.099	J	2.2	J	DIS-SP	3/27	0.36 - 4	2.2		17,600	NC		NO	BSL
7440-43-9	Cadmium	0.26	B	17.2		DIS-SP	9/21	0.59 - 1.5	17.2		81	NC		NO	BSL
7440-70-2	Calcium	73.8	B	7,700		601-02-B-5	21/21		7,700		NF	NF		NO	NUT
86-74-8	Carbazole	0.14	J	0.14	J	IA-SP	1/18	0.36 - 8.1	0.14		120	C		NO	BSL
75-15-0	Carbon disulfide	0.0014	J	0.0014	J	IA-B-1	1/10	0.0053 - 2.6	0.0014		120	NC		NO	BSL
108-90-7	Chlorobenzene	0.001	J	7		501-09-B-8	4/85	0.005 - 54	7		54	NC		NO	BSL
75-00-3	Chloroethane			0.0068		IA-B-1	1/10	0.0053 - 2.6	0.0068		6.5	C		NO	BSL
74-87-3	Chloromethane	0.0027	J	0.24	JB	DIS-B-1	4/65	0.005 - 0.0069	0.24		2.7	C		NO	BSL
7005-72-3	Chlorophenyl phenyl ether, 4-	74	E	82	D	DIS-SPDL	2/27	0.36 - 4	82		180 (5)	NC		NO	BSL
16065-83-1	Chromium	7.4		145		SHD-SP	21/21		145		64 (5)	C		YES	ASL
218-01-9	Chrysene	0.11	J	3.4	J	DIS-SP	6/28	0.36 - 4	3.4		290	C		YES	MCC
7440-48-4	Cobalt	4.6		90.2		IA-SP	17/21	11.8 - 12.7	90.2		12,300	NC		NO	BSL
7440-50-8	Copper	2.8		421		DIS-SP	21/21		421		7,600	NC		NO	BSL
74-90-8	Cyanide	0.93		3.1		DIS-SP	2/20	0.55 - 3.7	3.1		3.5	NC		NO	BSL
110-82-7	Cyclohexane	0.048	J	0.048	J	501-09-B-2	1/10	0.011 - 5.3	0.048		3,200	NC		NO	BSL
72-54-8	DDD, 4,4'-	0.0092	P	0.12		DUP02 (TS02-SP)	3/17	0.0036 - 0.2	0.12		17	C		NO	BSL
50-29-3	DDT, 4,4'	0.0088	j	0.19		502B-SP	2/16	0.0036 - 0.2	0.19		12	C		NO	BSL
84-74-2	Di-n-butylphthalate	0.16	J	2.2	J	DIS-SP	6/27	0.36 - 4	2.2		8,800	NC		NO	BSL
117-84-0	Di-n-octylphthalate	0.061	J	0.63	J	QH-SP	3/27	0.36 - 8.1	0.63		1,800	NC		NO	BSL
95-50-1	Dichlorobenzene, 1,2-	0.00081	J	0.052		IA-B-1	2/10	0.0054 - 2.6	0.052		330	NC		NO	BSL
75-34-3	Dichloroethane, 1,1-	0.0006	J	16.8		DAR-B-2	17/85	0.005 - 54	16.8		210	NC		NO	BSL
107-06-2	Dichloroethane, 1,2-	0.002	J	0.018		IA-B-1	3/30	0.0053 - 54	0.018		0.76	C		NO	BSL
540-59-0	Dichloroethene (total), 1,2-	0.001	J	7.1		TS01-SPRE	13/21	0.012 - 54	7.1		15	NC		NO	BSL
75-35-4	Dichloroethene, 1,1-	0.003	J	0.27	J	DIS-B-1	2/30	0.0053 - 54	0.27		0.12	C		YES	ASL
156-59-2	Dichloroethene, cis-1,2-	0.0014	J	172		DAR-B-2	9/65	0.0026 - 0.005	172		15	NC		YES	ASL
60-57-1	Dieldrin	0.0057	P	0.0057	P	TS02-SP	1/16	0.0036 - 0.2	0.0057		0.15	C		NO	BSL
84-66-2	Diethylphthalate	0.26	J	0.26	J	TS01-SP	1/17	0.36 - 8.1	0.26		70,500	NC		NO	BSL
131-11-3	Dimethylphthalate	0.23	J	0.45	J	TS02-SP	2/27	0.36 - 8.1	0.45		880,900	NC		NO	BSL
NF	Endosulfan I	0.0021	P	0.0021	P	TS02-SP	1/16	0.0019 - 0.1	0.0021		530 (5)	NC		NO	BSL
100-41-4	Ethylbenzene	0.0007	J	52.3		DAR-B-2	25/85	0.005 - 0.014	52.3		600	NC		NO	BSL
206-44-0	Fluoranthene	0.46	J	1.7		DUP02 (TS02-SP)	4/28	0.36 - 8.1	1.7		3,000	NC		NO	BSL
76-44-8	Heptachlor	0.0044	P	0.0044	P	TS02-SP	1/16	0.0019 - 0.1	0.0044		0.55	C		NO	BSL
193-39-5	Indeno(1,2,3-cd)pyrene	0.64		0.64		IA-SP	1/18	0.36 - 8.1	0.64		2.9	C		YES	MCC
7439-89-6	Iron	24,800		63,000		SB-7A/4-5	21/21		63,000		61,200	NC		YES	ASL
98-82-8	Isopropylbenzene	0.12		0.38		501-09-B-2	2/10	0.0053 - 2.6	0.38		52	NC		NO	BSL
7439-92-1	Lead	4	j	235		IA-SP	21/21		235		1,000	NC		NO	BSL
7439-95-4	Magnesium	1200		20,000		504-B-5	21/21		20,000		NF	NF		NO	NUT

TABLE 2.2a
OCCURRENCE, DISTRIBUTION AND SELECTION OF SUBSURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium: Exposure Point:		Future Subsurface Soil Subsurface Soil Exposure Unit 1													
CAS Number	Chemical	Minimum (1) Concentration (mg/kg)	Minimum Qualifier	Maximum (1) Concentration (mg/kg)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background (2) Value (mg/kg)	Screening (3) Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	Rationale for (4) Contaminant Deletion or Selection
7439-96-5	Manganese	176		1,530		SHD-SP	21/21		1,530			3,200	NC		NO BSL
7439-97-6	Mercury (elemental)	0.017	B	15.6		SHD-SP	12/21	0.11 - 0.15	15.6		61	NC		NO BSL	
79-20-9	Methyl acetate	0.2	J	0.2	J	TS1-B-1	1/10	0.011 - 5.3	0.2		9,600	NC		NO BSL	
108-87-2	Methylcyclohexane	0.0011	J	0.12	J	501-09 B-2	3/10	0.011 - 5.3	0.12		880	NC		NO BSL	
108-10-1	Methyl-2-pentanone, 4-	0.0033	J	1.2		TS1-B-1	3/10	0.021 - 11	1.2		290	NC		NO BSL	
75-09-2	Methylene chloride	0.002	J	6.2		DAR B-2	8/85	0.0008 - 54	6.2		21	C		NO BSL	
95-48-7	Methylphenol, 2-	0.06	J	0.22	J	601-02 B-5	2/10	0.36 - 4	0.22		4,400	NC		NO BSL	
106-44-5	Methylphenol, 4-	0.094	J	6.5		IA-B-1	4/28	0.36 - 8.1	6.5		440	NC		NO BSL	
91-20-3	Naphthalene	0.96	J	3.7		DIS-B-4	5/82	0.005 - 8.1	3.7		19	NC		NO BSL	
7440-02-0	Nickel	9.4		141		DIS-SP	18/21	9.5 - 10.8	141		4,100	NC		NO BSL	
87-86-5	Pentachlorophenol	2.5	J	11		DUP02 (TS02-SP)	2/17	0.88 - 20	11		11	C		NO BSL	
85-01-8	Phenanthrene	0.29	J	1.4	J	DUP02 (TS02-SP)	5/28	0.36 - 8.1	1.4		19 (5)	NC		NO BSL	
108-95-2	Phenol	0	J	2.3	J	DIS-SP	8/27	0.36 - 8.1	2.3		52,900	NC		NO BSL	
7440-09-7	Potassium	1,200		16,500		504-B-5	21/21		16,500		NF	NF		NO NUT	
129-00-0	Pyrene	0.35	J	2.7	J	DIS-SP	6/28	0.36 - 4	2.7		5,400	NC		NO BSL	
7782-49-2	Selenium	0.51	BJG	0.51	BJG	501-09 B-09	1/4	0.55 - 0.59	0.51		1,000	NC		NO BSL	
7440-22-4	Silver	83.3		83.3		DIS-SP	1/16	2.2 - 3	83.3		1,000	NC		NO BSL	
7440-23-5	Sodium	123	B	575	B	IA-SP	14/21	125 - 2940	575		NF	NF		NO NUT	
100-42-5	Styrene	3.85		3.85		DIS-B-2	1/65	0.005 - 2.6	3.85		2,000	NC		NO BSL	
79-34-5	Tetrachloroethane, 1,1,2,2-	0.006	J	0.02		504-S-4	3/85	0.005 - 54	0.02		0.9	C		NO BSL	
127-18-4	Tetrachloroethene	0.0046	J	700	D	DIS-SPREDL	28/85	0.0009 - 0.29	700		0.9	C		YES ASL	
7446-18-6	Thallium	0.84	B	343		DIS-SP	10/21	0.71 - 0.9	343		13	NC		YES ASL	
108-88-3	Toluene	0.0004	J	412		DAR B-2	29/86	0.0005 - 0.014	412		200	NC		YES ASL	
76-13-1	Trichloro-1,2,2-trifluoroethane, 1,1,2-	1.5	J	1.5	J	DIS-B-1	1/10	0.0053 - 0.26	1.5		6,900	NC		NO BSL	
120-82-1	Trichlorobenzene, 1,2,4-	0.0013	JB	530		501-09 B-8	2/65	0.005 - 2.6	530		760	NC		NO BSL	
71-55-6	Trichloroethane, 1,1,1-	0.0007	J	72		DIS-SPRE	11/85	0.002 - 1.6	72		320	NC		NO BSL	
79-01-6	Trichloroethene	0.0029	J	1,020		DIS-B-1	23/85	0.001 - 0.31	1,020		1.9	C		YES ASL	
7440-62-2	Vanadium	3.8		152		504-B-5	21/21		152		1,400	NC		NO BSL	
75-01-4	Vinyl chloride	0.0023	J	0.093		TS02-SP	4/30	0.0053 - 54	0.093		0.83	C		NO BSL	
NF	Xylene, m&p-	0.037		208		DAR B-2	13/55	0.01 - 0.01	208		450 (5)	NC		NO BSL	
95-47-6	Xylene, o-	0.032		75.2		DAR B-2	12/55	0.005 - 0.005	75.2		450 (5)	NC		NO BSL	
1330-20-7	Xylenes	0.004	J	200		DIS-SPRE	16/30	0.011 - 0.014	200		450	NC		NO BSL	
7440-66-6	Zinc	35		420		601-02 B-5	21/21		420		61,200	NC		NO BSL	

(1) Minimum/maximum detected concentration.

(2) No background information is available for subsurface soil.

(3) November 22, 2000. Region IX PRG Table. Lower of the industrial values at HI of 0.1 for noncarcinogenic effects (NC) and 1E-06 risk for carcinogenic effects (C). Lead screening value based on IEUBK model.

Not appropriate to adjust to HI of 0.1.

(4) Rationale Codes Selection Reason:

Supplemental Guidance to RAGS for Members of a Chemical Class (MCC)

Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason:

Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5) The noted screening values are based on closely related surrogates as follows:

Phenanthrene based on naphthalene

Chromium based on chromium VI

Benzo(g,h,i)perylene based on naphthalene

Endosulfan I based on endosulfan

o, m, p-Xylene based on xylene

4-Chlorophenyl phenyl ether based on pentabromodiphenyl ether

Definitions: COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

J = Estimated Value

B=Present in analytical method blank.

D,DL=Results from diluted sample.

E=Concentration exceeds instrument calibration range.

j=Concentration considered an estimate based on data validation.

n=Multi-component target compound exhibited marginal pattern-matching quality.

N=Spiked sample recovery not within control limits.

P=Sample vial used previous analysis

DUP=Duplicate sample.

Sample designation followed by "SP" - Denotes soils below pads.

TABLE 2.2b
OCCURRENCE, DISTRIBUTION AND SELECTION OF SUBSURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Subsurface Soil
Exposure Point:	Drainage Ditch, EU 2

CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background Value (mg/kg)	(2) Screening Toxicity Value (mg/kg)	(3) Potential ARAR/TBC	Potential ARAR/TBC Value (mg/kg)	COPC Flag	(4) Rationale for Contaminant Deletion or Selection
83-32-9	Acenaphthene	0.06	J	0.06	J	SB-6A/4-5	1/2	0.42 - 0.42	0.06		3,800	NC		NO	BSL
67-64-1	Acetone	0.025		0.36		SB-8A/4-5	2/2		0.36		620	NC		NO	BSL
7429-90-5	Aluminum	36,000		38,700	J	SB-8A/4-5	2/2		38,700		167,700	NC		NO	BSL
120-12-7	Anthracene	0.1	J	0.1	J	SB-6A/4-5	1/2	0.42 - 0.42	0.1		39,000	NC		NO	BSL
7440-36-0	Antimony	3	J	3	J	SB-8A/4-5	1/2	1.2 - 1.2	3		82	NC		NO	BSL
7440-38-2	Arsenic	6.5		6.6		SB-8A/4-5	2/2		6.6		2.7	C		YES	ASL
7440-39-3	Barium	240		584	J	SB-8A/4-5	2/2		584		12,500	NC		NO	BSL
56-55-3	Benz(a)anthracene	0.19	J	0.19	J	SB-6A/4-5	1/2	0.42 - 0.42	0.19		2.9	C		NO	BSL
50-32-8	Benz(a)pyrene	0.17	J	0.17	J	SB-6A/4-5	1/2	0.42 - 0.42	0.17		0.29	C		NO	BSL
205-99-2	Benz(b)fluoranthene	0.12	J	0.12	J	SB-6A/4-5	1/2	0.42 - 0.42	0.12		2.9	C		NO	BSL
191-24-2	Benz(g,h,i)perylene	0.092	J	0.092	J	SB-6A/4-5	1/2	0.42 - 0.42	0.092		19 (5)	NC		NO	BSL
207-08-9	Benz(k)fluoranthene	0.16	J	0.16	J	SB-6A/4-5	1/2	0.42 - 0.42	0.16		29	C		NO	BSL
7440-41-7	Beryllium	1.1		2.3		SB-8A/4-5	2/2		2.3		370	NC		NO	BSL
7440-70-2	Calcium	1,310	J	1,400		SB-6A/4-5	2/2		1,400		NF	NF		NO	NUT
86-74-8	Carbazole	0.11	J	0.11	J	SB-6A/4-5	1/2	0.42 - 0.42	0.11		120	C		NO	BSL
16065-83-1	Chromium	38	J	45		SB-6A/4-5	2/2		45		64 (5)	C		NO	BSL
218-01-9	Chrysene	0.19	J	0.19	J	SB-6A/4-5	1/2	0.42 - 0.42	0.19		290	C		NO	BSL
7440-48-4	Cobalt	2.6		8		SB-8A/4-5	2/2		8		12,300	NC		NO	BSL
7440-50-8	Copper	12.5		18		SB-6A/4-5	2/2		18		7,600	NC		NO	BSL
72-54-8	DDD, 4,4'	0.0051		0.0051		SB-6A/4-5	1/2	0.0041 - 0.0041	0.0051		17	C		NO	BSL
132-64-9	Dibenzofuran	0.053	J	0.053	J	SB-6A/4-5	1/2	0.42 - 0.42	0.053		510	NC		NO	BSL
206-44-0	Fluoranthene	0.4	J	0.4	J	SB-6A/4-5	1/2	0.42 - 0.42	0.4		3,000	NC		NO	BSL
193-39-5	Indeno(1,2,3-c,d)pyrene	0.095	J	0.095	J	SB-6A/4-5	1/2	0.42 - 0.42	0.095		3	C		NO	BSL
7439-89-6	Iron	27,300	J	41,000		SB-6A/4-5	2/2		41,000		61,200	NC		NO	BSL
7439-92-1	Lead	20.5		37		SB-6A/4-5	2/2		37		1,000	NC		NO	BSL
7439-95-4	Magnesium	1,700		5,930		SB-8A/4-5	2/2		5,930		NF	NF		NO	NUT
7439-96-5	Manganese	160		549	J	SB-8A/4-5	2/2		549		3,200	NC		NO	BSL
7487-94-7	Mercury	0.14		0.14		SB-6A/4-5	1/2	0.13 - 0.13	0.14		61	NC		NO	BSL
91-57-6	Methylnaphthalene, 2-	0.047	J	0.13	J	SB-8A/4-5	2/2		0.13		19	NC		NO	BSL
106-44-5	Methylphenol, 4-	0.26	J	0.26	J	SB-6A/4-5	1/2	0.42 - 0.42	0.26		440	NC		NO	BSL
7440-02-0	Nickel	13		26.4		SB-8A/4-5	2/2		26.4		4,100	NC		NO	BSL
85-01-8	Phenanthrene	0.072	J	0.35	J	SB-6A/4-5	2/2		0.35		19 (5)	NC		NO	BSL
7440-09-7	Potassium	1,900		3620		SB-8A/4-5	2/2		3,620		NF	NF		NO	NUT
129-00-0	Pyrene	0.33	J	0.33	J	SB-6A/4-5	1/2	0.42 - 0.42	0.33		5,400	NC		NO	BSL
7440-23-5	Sodium	71		71		SB-6A/4-5	1/2	17.6 - 17.6	71		NF	NF		NO	NUT
7440-28-0	Thallium	1.7		1.7		SB-6A/4-5	1/2	2.1 - 2.1	1.7		13.5	NC		NO	BSL

TABLE 2.2b
OCCURRENCE, DISTRIBUTION AND SELECTION OF SUBSURFACE SOIL CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Subsurface Soil
Exposure Point:	Drainage Ditch, EU 2

CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening	Background Value (mg/kg)	(2) Screening Toxicity Value (mg/kg)	(3) Potential ARAR/TBC	Potential ARAR/TBC Value (mg/kg)	COPC Flag	(4) Rationale for Contaminant Deletion or Selection
108-88-3	Toluene	0.012	J	0.012	J	SB-8A/4-5	1/2	0.0012 - 0.0012	0.012		200	NC		NO	BSL
7440-62-2	Vanadium	68.1		83		SB-6A/4-5	2/2			83	1,400	NC		NO	BSL
7440-66-6	Zinc	48.5	J	140		SB-6A/4-5	2/2			140	61,200	NC		NO	BSL

(1)Minimum/maximum detected concentration.

(2)No background information is available for subsurface soil.

(3)November 22, 2000. Region IX PRG Table. Lower of the industrial values at HI of 0.1 for noncarcinogenic effects (NC) and

1E-06 risk for carcinogenic effects (C). Lead screening value based on IEUBK model.

Not appropriate to adjust to HI of 0.1.

(4)Rationale Codes Selection Reason: Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason: Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5)The noted screening values are based on closely related surrogates as follows:

Chromium based on Chromium VI

Phenanthrene based on Naphthalene

Benzo(g,h,i)perylene based on Naphthalene

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

J = Estimated Value

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

TABLE 2.3
OCCURRENCE, DISTRIBUTION AND SELECTION OF SEDIMENT CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Current/Future Medium: Sediment Exposure Medium: Sediment Exposure Point: Exposure Unit 2															
CAS Number	Chemical	Minimum Concentration (mg/kg)	(1) Minimum Qualifier	Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background Value (mg/kg)	Screening Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection
67-64-1	Acetone	0.002	BJ	0.02		SD01	7/20	0.0064 - 0.025	0.02	N/A	160	NC		NO	BSL
309-00-2	Aldrin	0.0082	P	0.011		SD02	2/16	0.0021 - 0.0027	0.011	N/A	0.029	C		NO	BSL
7429-90-5	Aluminum	1,810	FG	31,300	G	SD02	22/22		31,300	4,688	7,600	NC		YES	ASL
120-12-7	Anthracene	0.042	J	0.042	J	SD-5	1/6	0.43 - 0.52	0.042	N/A	2,200	NC		NO	BSL
7440-36-0	Antimony	0.6		6.2	B	SD02	4/22	0.5 - 9	6.2	2.75	3.1	NC		YES	ASL
12672-29-6	Aroclor 1248	0.17		0.17		SD01	1/20	0.041 - 0.45	0.17	N/A	0.22	C		YES	MCC
11097-69-1	Aroclor 1254	0.034	JP	0.12		SD02	2/20	0.041 - 0.45	0.12	N/A	0.11	NC		YES	ASL
7440-38-2	Arsenic	0.36	B	5.3		SD-2	15/22	0.47 - 2.7	5.3	0.977	0.39	C		YES	ASL
7440-39-3	Barium	15.7	B	937		SD02	22/22		937	33.79	540	NC		YES	ASL
56-55-3	Benzo(a)anthracene	0.055	J	0.15	J	SD-5	3/20	0.41 - 0.55	0.15	N/A	0.62	C		YES	MCC
50-32-8	Benzo(a)pyrene	0.064	J	0.16	J	SD-5	2/20	0.41 - 0.55	0.16	N/A	0.062	C		YES	ASL
205-99-2	Benzo(b)fluoranthene	0.066	J	0.16	J	SD-5	2/20	0.41 - 0.55	0.16	N/A	0.62	C		YES	MCC
207-08-9	Benzo(k)fluoranthene	0.074	J	0.14	J	SD-5	2/20	0.41 - 0.55	0.14	N/A	6.2	C		YES	MCC
7440-41-7	Beryllium	0.27	B	1.4		SD02	12/22	0.22 - 1.5	1.4	0.815	15	NC		NO	BSL
319-86-8	BHC, delta-	0.005	P	0.005	P	SD02	1/16	0.0021 - 0.0028	0.005	N/A	0.09 (5)	C		NO	BSL
117-81-7	Bis(2-ethylhexyl)phthalate	0.07	BJ	4.2		SD02	8/20	0.41 - 0.52	4.2	N/A	35	C		NO	BSL
85-68-7	Butylbenzylphthalate	0.06	J	0.46	J	SD02	2/20	0.41 - 0.55	0.46	N/A	1200	NC		NO	BSL
7440-43-9	Cadmium	0.31		2		SD02	6/22	0.13 - 1.5	2	0.824	3.7	NC		NO	BSL
7440-70-2	Calcium	88		6,890		SD02	22/22		6,890	205.6	NF	NF			NUT
67-66-3	Chloroform	0.0008	J	0.002	J	SD02	3/20	0.0013 - 0.016	0.002	N/A	0.039	NC		NO	BSL
16065-83-1	Chromium	4		77	G	SD02	22/22		77	19.3	23 (5)	NC		YES	ASL
218-01-9	Chrysene	0.059	J	0.17	J	SD-5	3/20	0.41 - 0.55	0.17	N/A	62	C		YES	MCC
7440-48-4	Cobalt	1.2		18		SD-2	14/22	0.9 - 15.2	18	7.53	470	NC		NO	BSL
7440-50-8	Copper	2.8		79.3		SD02	20/22	2 - 5.9	79.3	4.64	290	NC		NO	BSL
57-12-5	Cyanide (free)	3		3.8		SD02	3/20	0.24 - 7.1	3.8	3.73	120	NC		NO	BSL
72-54-8	DDD, 4,4'-	0.011	P	0.015	P	SD02	2/16	0.0041 - 0.0055	0.015	N/A	2.4	C		NO	BSL
72-55-9	DDE, 4,4'-	0.0053	P	0.0088	P	SD02	2/16	0.0041 - 0.0055	0.0088	N/A	1.7	C		NO	BSL
50-29-3	DDT, 4,4'-	0.0061	P	0.017	P	SD02	2/16	0.0041 - 0.0055	0.017	N/A	1.7	C		NO	BSL
84-74-2	Di-n-butylphthalate	0.046	JB	0.37	J	SD02	7/20	0.41 - 0.55	0.37	N/A	610	NC		NO	BSL
117-84-0	Di-n-octylphthalate	0.028	J	1.4		SD02	2/20	0.41 - 0.55	1.4	N/A	120	NC		NO	BSL
106-46-7	Dichlorobenzene, 1,4-	0.064	J	0.064	J	SD02	1/20	0.41 - 0.55	0.064	N/A	3.4	C		NO	BSL
75-34-3	Dichloroethane, 1,1-	0.0007	J	0.013	J	SD02	3/20	0.0013 - 0.016	0.013	N/A	59	NC		NO	BSL
107-06-2	Dichloroethane, 1,2-	0.001	J	0.001	J	SD02	1/20	0.0013 - 0.016	0.001	N/A	0.35	C		NO	BSL
540-59-0	Dichloroethene (total), 1,2-	0.002	J	0.055		SD02	6/20	0.0026 - 0.016	0.055	N/A	4.3	NC		NO	BSL
60-57-1	Die�din	0.0014	JPX	0.018		SD02	3/16	0.0041 - 0.0052	0.018	N/A	0.03	C		NO	BSL
33213-65-9	Endosulfan II	0.0074	P	0.0074	P	SD01	1/16	0.0042 - 0.0055	0.0074	N/A	37.0 (5)	NC		NO	BSL
7421-93-4	Endrin aldehyde	0.0071		0.0071		SD02	1/16	0.0041 - 0.0052	0.0071	N/A	1.8 (5)	NC		NO	BSL
206-44-0	Fluoranthene	0.062	J	0.32	J	SD-5	4/20	0.41 - 0.55	0.32	N/A	230	NC		NO	BSL
76-44-8	Heptachlor	0.0028	P	0.0028	P	SD02	1/16	0.0021 - 0.0028	0.0028	N/A	0.11	C		NO	BSL
7439-89-6	Iron	2,010		37,100	G	SD02	22/22		37,100	7,012	2,300	NC		YES	ASL
7439-92-1	Lead	3.4		76.8	G	SD02	22/22		76.8	19.54	400	NC		NO	BSL
7439-95-4	Magnesium	329	B	12,300		SD02	22/22		12,300	842.8	NF	NF		NO	NUT
7439-96-5	Manganese	38.6		2,600		SD-2	22/22		2,600	164.26	180	NC		YES	ASL

TABLE 2.3
OCCURRENCE, DISTRIBUTION AND SELECTION OF SEDIMENT CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium: Exposure Point:		Chemical Inventory and Screening Data														
CAS Number	Chemical	(1) Minimum Concentration (mg/kg)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/kg)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/kg)	Concentration Used for Screening (mg/kg)	Background Value (mg/kg)	Screening Toxicity Value (mg/kg)	Potential ARAR/TBC Value (mg/kg)	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection	
7487-94-7	Mercury	0.13		3.6		SD-5	8/22	0.1 - 0.16	3.6	0.122	2.3	NC		YES	ASL	
75-09-2	Methylene chloride	0.002	BJ	0.038	B	SD01	4/20	0.0013 - 0.016	0.038	0.0164	8.9	C		NO	BSL	
106-44-5	Methylphenol, 4-	0.037	J	0.037	J	SD-5	1/6	0.43 - 0.52	0.037	N/A	31	NC		NO	BSL	
7440-02-0	Nickel	3		48.6		SD02	17/22	2 - 12	48.6	7.11	160	NC		NO	BSL	
85-01-8	Phenanthrene	0.13	J	0.14	J	SD-5	2/20	0.41 - 0.55	0.14	N/A	5.6 (5)	NC		NO	BSL	
108-95-2	Phenol	0.11	J	0.11	J	SD02	1/20	0.41 - 0.55	0.11	N/A	3,700	NC		NO	BSL	
7440-09-7	Potassium	314	B	10,300	G	SD02	22/22		10,300	1,079.8	NF	NF		NO	NUT	
129-00-0	Pyrene	0.055	J	0.27	J	SD-5	4/20	0.41 - 0.55	0.27	N/A	230	NC		NO	BSL	
7440-23-5	Sodium	8	B	402	B	SD02	12/22	41 - 150	402	169.92	NF	NF		NO	NUT	
127-18-4	Tetrachloroethene	0.0009	J	0.017		SD02	8/20	0.0013 - 0.016	0.017	N/A	5.7	C		NO	BSL	
7440-28-0	Thallium	1.9		3.2		SD-002	2/8	1.3 - 2.7	3.2	0.8	0.52	NC		YES	ASL	
108-88-3	Toluene	0.001	BJ	0.009	J	SD-5	3/20	0.0013 - 0.014	0.009	N/A	59	NC		NO	BSL	
120-82-1	Trichlorobenzene, 1,2,4-	0.048	J	0.048	J	SD02	1/20	0.41 - 0.55	0.048	N/A	65	NC		NO	BSL	
71-55-6	Trichloroethane, 1,1,1-	0.003	J	0.003	J	SD02	1/20	0.0013 - 0.016	0.003	N/A	77	NC		NO	BSL	
79-01-6	Trichloroethene	0.0007	J	0.01	J	SD02	6/20	0.0013 - 0.016	0.01	N/A	2.3	NC		NO	BSL	
7440-62-2	Vanadium	4	B	105	G	SD02	20/22	13.4 - 14.8	105	14.03	55	NC		YES	ASL	
7440-66-6	Zinc	11		157	G	SD02	22/22		157	27.86	2,300	NC		NO	BSL	

(1)Minimum/maximum detected concentration.

(2)Background value is two times the mean concentration or one-half of the Practical Quantitation Limit (PQL)

for analytes that were below detection limits (BDL)

(3)November 22, 2000. Region IX PRC Table. Lower of the residential values at HI of 0.1 for noncarcinogenic effects (NC) and 1E-06 risk for carcinogenic effects (C). Lead screening value based on IEUBK model.

Not appropriate to adjust to HI of 0.1.

(4)Rationale Codes Selection Reason: Supplemental Guidance to RAGS for Members of a Chemical Class (MCC)
Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason: Background Levels (BKG)
Essential Nutrient (NUT)

Below Screening Level (BSL)

(5)The noted screening values are based on closely related surrogates as follows:

Chromium based on chromium VI

delta-BHC based on alpha-BHC

Endosulfan II based on endosulfan

Endrin aldehyde based on endrin

Phenanthrene based on naphthalene

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

B = Analyte detected in associated method blank

P = Concentration difference between the two GC columns is >25%

J = Estimated Value

G = Duplicated analysis not within control limits

F = Concentration exceeds instrument calibration range

X = Data entered manually into report-generating software

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

TABLE 2.4
OCCURRENCE, DISTRIBUTION AND SELECTION OF GROUNDWATER CHEMICALS OF POTENTIAL CONCERN
AQUA-TECH SITE

Scenario Timeframe: Future Medium: Groundwater Exposure Medium: Groundwater Exposure Point: Exposure Unit 1 or 2																
CAS Number	Chemical	Minimum Concentration (mg/L)	Minimum Qualifier	Maximum Concentration (mg/L)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/L)	Concentration Used for Screening (mg/L)	Background Value (mg/L)	Screening Toxicity Value (mg/L)	Potential ARAR/TBC Value (mg/L)	Potential ARAR/TBC Source	COPC Flag	Rationale Contaminant Deletion or Selection	
67-64-1	Acetone	0.00052	J	0.0099	JB	MW-13	7/47	0.001 - 0.33	0.0099	N/A	0.061	NC	NF	NO	BSL	
7429-90-5	Aluminum	0.059	B	43.1		MW-16A	9/11	0.2 - 0.2	43.1	0.54	3.6	NC	NF	YES	ASL	
7440-36-0	Antimony	0.0028	B	0.0062	B	MW-6A	5/11	0.06 - 0.06	0.0062	0.03	0.0015	NC	0.006	SCDHEC, 2001	YES	ASL
7440-38-2	Arsenic	0.0043	B	0.0287		MW-7	3/11	0.01 - 0.1	0.0287	0.005	0.000045	C	0.05	SCDHEC, 2001	YES	ASL
7440-39-3	Barium	0.018	B	0.52		MW-7	11/11		0.52	0.1	0.26	NC	2	SCDHEC, 2001	YES	ASL
71-43-2	Benzene	0.00023	J	0.054		MW-3	11/47	0.001 - 0.033	0.054	N/A	0.00035	C	0.005	SCDHEC, 2001	YES	ASL
7440-41-7	Beryllium	0.0025	B	0.0025	B	MW-24	1/11	0.005 - 0.005	0.0025	0.0025	0.0073	NC	0.004	SCDHEC, 2001	NO	BSL
117-81-7	Bis(2-ethylhexyl)phthalate	0.0044	J	0.011		MW-16A	2/18	0.001 - 0.01	0.011	N/A	0.0048	C	0.006	SCDHEC, 2001	YES	ASL
75-27-4	Bromodichloromethane	0.00025	J	0.00025	J	MW-24A	1/47	0.001 - 0.033	0.00025	N/A	0.00018	C	0.08	SCDHEC, 2001	YES	ASL
75-25-2	Bromoform	0.00042	J	0.00042	J	MW-8	1/47	0.001 - 0.033	0.00042	N/A	0.0085	C	NF	NF	NO	BSL
78-93-3	Butanone, 2-	0.0012	J	0.0012	J	TW-5	1/47	0.01 - 0.33	0.0012	N/A	0.19	NC	NF	NF	NO	BSL
7440-43-9	Cadmium	0.0003	BJ	0.00033	B	MW-16A	2/11	0.005 - 0.005	0.00033	0.0025	0.0018	NC	0.005	SCDHEC, 2001	NO	BSL
7440-70-2	Calcium	1	B	76	J	MW-9A	11/11		76	2.5	NF	NF	NF	NF	NO	NUT
105-60-2	Caprolactam	0.008	J	0.008	J	MW-16A	1/18	0.01 - 0.01	0.008	N/A	1.8	NC	NF	NF	NO	BSL
56-23-5	Carbon tetrachloride	0.002	J	0.002	J	MW-10	1/47	0.001 - 0.033	0.002	N/A	0.00017	C	0.005	SCDHEC, 2001	YES	ASL
108-90-7	Chlorobenzene	0.00027	J	0.023		MW-9	7/47	0.001 - 0.033	0.023	N/A	0.011	NC	0.1	SCDHEC, 2001	YES	ASL
75-00-3	Chloroethane	0.001	J	0.18		MW-7	9/47	0.002 - 0.067	0.18	N/A	0.0046	C	NF	YES	ASL	
67-66-3	Chloroform	0.00042	J	0.079		MW-10	12/47	0.001 - 0.033	0.079	N/A	0.00016	C	0.08	USEPA 2000d	YES	ASL
18540-29-9	Chromium	0.0014	B	0.026		MW-24	7/11	0.01 - 0.01	0.026	0.005	0.011 (5)	NC	0.1	SCDHEC, 2001	YES	ASL
7440-48-4	Cobalt	0.0033	B	0.23		MW-9A	6/11	0.05 - 0.05	0.23	0.025	0.22	NC	NF	YES	ASL	
7440-50-8	Copper	0.0078	B	0.014	B	MW-24	4/11	0.025 - 0.025	0.014	0.0125	0.14	NC	NF	NF	NO	BSL
110-82-7	Cyclohexane	0.0016	J	0.0054	J	MW-3	2/47	0.001 - 0.033	0.0054	N/A	3.5	NC	NF	NF	NO	BSL
84-74-2	Di-n-butylphthalate	0.0014	J	0.0023	B	MW-9A	4/18	0.01 - 0.01	0.0023	N/A	0.36	NC	NF	NF	NO	BSL
95-50-1	Dichlorobenzene, 1,2-	0.00078	J	0.0073	J	MW-11A	7/47	0.001 - 0.033	0.0073	N/A	0.037	NC	0.6	SCDHEC, 2001	NO	BSL
541-73-1	Dichlorobenzene, 1,3-	0.00025	J	0.00025	J	MW-9	1/47	0.001 - 0.033	0.00025	N/A	0.00055	NC	NF	NF	NO	BSL
106-46-7	Dichlorobenzene, 1,4-	0.00035	J	0.01	B	MW-7	8/47	0.001 - 0.033	0.01	N/A	0.0005	C	0.075	SCDHEC, 2001	YES	ASL
75-71-8	Dichlorodifluoromethane	0.00045	J	0.00049	J	MW-2A	2/47	0.002 - 0.067	0.00049	N/A	0.039	NC	NF	NO	BSL	
75-34-3	Dichloroethane, 1,1-	0.0002	J	0.14		MW-3	26/47	0.001 - 0.029	0.14	N/A	0.081	NC	NF	NF	YES	ASL
107-06-2	Dichloroethane, 1,2-	0.00029	J	0.028	J	MW-13	8/47	0.001 - 0.033	0.028	N/A	0.00012	C	0.005	SCDHEC, 2001	YES	ASL
75-35-4	Dichloroethene, 1,1-	0.0043	J	0.094		MW-10	7/47	0.001 - 0.033	0.094	N/A	0.000046	C	0.007	SCDHEC, 2001	YES	ASL
NF	Dichloroethene, cis- 1,2-	0.00094		0.97		MW-12	27/47	0.0005 - 0.0028	0.97	N/A	NF	NF	0.07	SCDHEC, 2001	YES	NTX
NF	Dichloroethene, trans- 1,2-	0.00032	J	0.0039	J	MW-3	5/47	0.0005 - 0.017	0.0039	N/A	NF	NF	0.1	SCDHEC, 2001	YES	MCC
7439-89-6	Iron	0.18		95.4		MW-7	10/11	0.1 - 0.1	95.4	0.26	1.1	NC	NF	YES	ASL	
98-82-8	Isopropylbenzene	0.0003	J	0.00046	J	MW-9	2/47	0.001 - 0.033	0.00046	N/A	0.36	NC	NF	NF	NO	BSL
7439-92-1	Lead	0.0058		0.0068		MW-24	3/11	0.003 - 0.003	0.0068	0.0015	0.015	NC	0.015	USEPA 2000d	NO	BSL
7439-95-4	Magnesium	0.42	B	7.5	J	MW-7	10/10		7.5	2.5	NF	NF	NF	NF	NO	NUT
7439-96-5	Manganese	0.0056	B	2.9		MW-7	11/11		2.9	0.0075	0.088	NC	NF	NF	YES	ASL
7487-94-7	Mercury	0.000072	B	0.00028		MW-7	3/11	0.0002 - 0.0002	0.00028	0.0001	0.0011 (5)	NC	0.002	SCDHEC, 2001	NO	BSL
1634-04-4	Methyl tertbutyl ether	0.00015	J	0.016	J	MW-1	2/47	0.005 - 0.17	0.016	N/A	0.002	NC	NF	NF	YES	ASL

TABLE 2.4
OCCURRENCE, DISTRIBUTION AND SELECTION OF GROUNDWATER CHEMICALS OF POTENTIAL CONCERN
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater
Exposure Point:	Exposure Unit 1 or 2

CAS Number	Chemical	Minimum Concentration (mg/L)	Minimum Qualifier	Maximum Concentration (mg/L)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/L)	Concentration Used for Screening (mg/L)	Background Value (mg/L)	Screening Toxicity Value (mg/L)	Potential ARAR/TBC Value (mg/L)	Potential ARAR/TBC Source	COPC Flag	Rationale Contaminant Deletion or Selection	
75-09-2	Methylene chloride	0.00051	J	0.0021	J	MW-7	18/47	0.001 - 0.033	0.0021	N/A	0.0043	C	0.005	SCDHEC, 2001	NO	BSL
7440-02-0	Nickel	0.0023	B	0.059		MW-7	7/11	0.04 - 0.04	0.059	0.02	0.073	NC	NF	NF	NO	BSL
2023-69-5	Potassium	1.6	B	12.3		MW-7	11/11		12.3	2.5	NF	NF	NF	NF	NO	NUT
7440-23-5	Sodium	2.5	B	36.9	J	MW-7	11/11		36.9	2.5	NF	NF	NF	NF	NO	NUT
79-34-5	Tetrachloroethane, 1,1,2,2-	0.0026	J	0.036		MW-10	8/47	0.001 - 0.033	0.036	N/A	0.000055	C	NF	NF	YES	ASL
127-18-4	Tetrachloroethene	0.00037	J	1.2		MW-1	32/47	0.001 - 0.0056	1.2	N/A	0.0011	C	0.005	SCDHEC, 2001	YES	ASL
7446-18-6	Thallium	0.0054	B	0.0092	B	MW-26	6/11	0.01 - 0.01	0.0092	0.005	0.00024	NC	0.002	SCDHEC, 2001	YES	ASL
108-88-3	Toluene	0.00032	J	0.00082	J	MW-25	6/47	0.001 - 0.033	0.00082	N/A	0.072	NC	1	SCDHEC, 2001	NO	BSL
76-13-1	Trichloro-1,2,2-trifluoroethane, 1,1,2-	0.00065	J	0.012		MW-13	5/47	0.001 - 0.033	0.012	N/A	5.9	NC	NF	NF	NO	BSL
71-55-6	Trichloroethane, 1,1,1-	0.00033	J	0.26		MW-3	12/47	0.001 - 0.01	0.26	N/A	0.054	NC	0.2	SCDHEC, 2001	YES	ASL
79-01-6	Trichloroethene	0.00028	J	0.64		MW-12	26/47	0.001 - 0.0056	0.64	N/A	0.0016	C	0.005	SCDHEC, 2001	YES	ASL
75-69-4	Trichlorofluoromethane	0.0014	J	0.0014	J	MW-16	1/47	0.002 - 0.067	0.0014	N/A	0.13	NC	NF	NF	NO	BSL
7440-62-2	Vanadium	0.0011	B	0.028	B	MW-7	8/11	0.05 - 0.05	0.028	0.025	0.026	NC	NF	NF	YES	ASL
75-01-4	Vinyl chloride	0.00022	J	0.084		MW-7A	8/47	0.002 - 0.067	0.084	N/A	0.000041	C	0.002	SCDHEC, 2001	YES	ASL
1330-20-7	Xylenes	0.0052	J	0.026		MW-7	3/47	0.001 - 0.033	0.026	N/A	0.14	NC	10	SCDHEC, 2001	NO	BSL
7440-66-6	Zinc	0.019	B	0.032		MW-16A	5/11	0.02 - 0.02	0.032	0.01	1.1	NC	NF	NF	NO	BSL

(1) Minimum/maximum detected concentration.

(2) Background value is two times the mean concentration or one-half of the Practical Quantitation Limit (PQL) for analytes that were below detection limits (BDL)

(3) November 22, 2000, Region IX PRG Table. Tapwater values at HI of 0.1 for noncarcinogenic effects (NC) and 1E-06 risk for carcinogenic effects (C).

(4) Rationale Codes Selection Reason:

Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Supplemental Guidance to RAGS for Members of a Chemical Class (MCC)

Deletion Reason:

Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5) The noted screening values are based on closely related surrogates as follows:

Chromium based on Chromium VI

Mercury based on mercury compounds

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

J = Estimated Value

B = Analyte detected in associated method blank

D = Analyte value from diluted analysis

P = Sample vial used in previous analysis

C = Carcinogenic effects

N = Noncarcinogenic effects

NF = Not Found

SCDHEC, 2001 = South Carolina Drinking Water Standards

USEPA 2000d = EPA Drinking Water Regulations - EPA 822-B-00-001

TABLE 2.5
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE WATER CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water
Exposure Point:	Exposure Unit 2

CAS Number	Chemical	Minimum Concentration (mg/L)	Minimum Qualifier	Maximum Concentration (mg/L)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/L)	Concentration Used for Screening (mg/L)	Background Value (mg/L)	Screening Toxicity Value (mg/L)	Potential ARAR/TBC Value (mg/L)	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection
67-64-1	Acetone	0.003	BJ	0.016		SW02	5/14	0.01 - 0.01	0.016	0.0107	NF	NC	0	0	YES NTX
7429-90-5	Aluminum	0.0952	B	4.17		SW02	20/23	0.1 - 0.1	4.17	1.2626	NF	NC	0	0	YES NTX
7440-38-2	Arsenic	0.0025	B	0.0025	B	SW02	1/17	0.002 - 0.005	0.0025	0.005	0.000018	C	0.0014	SCDHEC R. 61-68	NO BKG
7440-39-3	Barium	0.027		0.191	B	SW02	19/23	0.05 - 0.05	0.191	0.0583	NF	NC	0	0	YES NTX
71-43-2	Benzene	0.0004	J	0.002	J	SW02	4/7	0.001 - 0.001	0.002	N/A	0.0012	C	0.005	SCDHEC R. 61-68	YES ASL
117-81-7	Bis(2-ethylhexyl)phthalate	0.001	BJ	0.01	B	SW02	4/15	0.01 - 0.011	0.01	0.0086	0.0018	C	0.006	SCDHEC R. 61-68	YES ASL
85-68-7	Cadmium	0.0043	B	3.47		SW-1	2/15	0.002 - 0.005	3.47	N/A	0.005	NC	0.005	SCDHEC R. 61-68	YES ASL
7440-70-2	Calcium	0.0018		31.9		SW02	23/23		31.9	7.506	NF		0	0	NO NUT
108-90-7	Chlorobenzene	0.003	J	0.004	J	SW02	2/2		0.004	N/A	0.68	NC	0.1	SCDHEC R. 61-68	NO BSL
67-66-3	Chloroform	0.0007	J	0.001	J	SW01	3/3		0.001	0.0008	0.0057	C	0.1	SCDHEC R. 61-68	NO BSL
18540-29-9	Chromium	0.0012		0.0359		SW02	3/23	0.0009 - 0.01	0.0359	0.0092	0.1 (5)	NC	0.1	SCDHEC R. 61-68	NO BSL
7440-48-4	Cobalt	0.02		0.0437	B	SW02	5/23	0.0009 - 0.05	0.0437	N/A	NF	NC	0	0	YES NTX
7440-50-8	Copper	0.0134	B	0.151		SW02	5/22	0.004 - 0.02	0.151	0.0121	1.3	NC	NF	NF	NO BSL
84-74-2	Di-n-butylphthalate	0.001	BJ	0.001	BJ	SW01	5/5		0.001	0.003	2.7	NC	12	0	NO BKG
106-46-7	Dichlorobenzene, 1,4-	0.002	J	0.002	J	SW02RE	1/1		0.002	N/A	0.4	C	0.075	SCDHEC R. 61-68	NO BSL
75-34-3	Dichloroethane, 1,1-	0.0005	J	0.01		SW02	8/20	0.001 - 0.01	0.01	0.0104	NF	NC	0	0	YES NTX
540-59-0	Dichloroethene, 1,2- (total)	0.0007	J	0.085		SW02	16/20	0.002 - 0.01	0.085	0.0156	0.7	NC	0.1	0	NO BSL
60-57-1	Dieldrin	0.000037	JX	0.000037	JX	SW01	1/1		0.000037	N/A	0.0000014	C	0.0000014	SCDHEC R. 61-68	YES ASL
84-66-2	Diethylphthalate	0.002	BJ	0.003	BJ	SW02	4/4		0.003	0.006	23	NC	120	SCDHEC R. 61-68	NO BSL
7439-89-6	Iron	0.296		10.5		SW02	23/23		10.5	1.2522	NF	NC	0	0	YES NTX
7439-92-1	Lead	0.003		0.038	*	SW02	12/14	0.003 - 0.0085	0.038	0.0113	NF		NF	SCDHEC R. 61-68	YES NTX
7439-95-4	Magnesium	1.1		12.5		SW02	23/23		12.5	2.836	NF		0	0	NO NUT
7439-96-5	Manganese	0.047		7.22		SW02	23/23		7.22	0.0946	NF	NC	0	0	YES NTX
7439-97-6	Mercury	0.00027		0.001		SW02	2/16	0.0002 - 0.0002	0.001	N/A	0.00005	NC	0.00015	SCDHEC R. 61-68	YES ASL
7440-02-0	Nickel	0.038		0.1		SW02	9/23	0.0023 - 0.04	0.1	0.0161	0.61	NC	0.1	SCDHEC R. 61-68	NO BSL
55-63-0	Nitrophenol, 2-	0.002	J	0.002	J	SW02	1/1		0.002	N/A	NF	C	0	0	YES NTX
108-95-2	Phenol	0.001	J	0.001	J	SW02	1/1		0.001	N/A	21	NC	4,600	SCDHEC R. 61-68	NO BSL
7440-09-7	Potassium	1.71		12.8		SW02	22/23	2 - 2	12.8	5.812	NF		0	0	NO NUT
7440-23-5	Sodium	2.9		41.7		SW02	23/23		41.7	39.32	NF		0	0	NO NUT
127-18-4	Tetrachloroethene	0.00041	J	0.012		SW02	12/20	0.001 - 0.01	0.012	0.01	0.0008	C	0.005	SCDHEC R. 61-68	YES ASL
7440-28-0	Thallium	0.006		0.006		SW-004	1/3	0.005 - 0.005	0.006	N/A	0.0017 (5)	NC	0.002	SCDHEC R. 61-68	YES ASL
108-88-3	Toluene	0.0006	BJ	0.002	J	SW02	3/3		0.002	0.0027	6.8	NC	1	SCDHEC R. 61-68	NO BSL
71-55-6	Trichloroethane, 1,1,1-	0.0004	J	0.005	J	SW02	3/14	0.01 - 0.01	0.005	0.001	0.2	NC	0.2	SCDHEC R. 61-68	NO BSL
79-01-6	Trichloroethylene	0.0005	J	0.038		SW02	14/20	0.001 - 0.01	0.038	0.01	0.0027	C	0.005	SCDHEC R. 61-68	YES ASL

TABLE 2.5
OCCURRENCE, DISTRIBUTION AND SELECTION OF SURFACE WATER CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water
Exposure Point:	Exposure Unit 2

CAS Number	Chemical	Minimum Concentration (mg/L)	Minimum Qualifier	Maximum Concentration (mg/L)	Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/L)	Concentration Used for Screening (mg/L)	Background Value (mg/L)	Screening Toxicity Value (mg/L)	Potential ARAR/TBC Value (mg/L)	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection
7440-62-2	Vanadium	0.0011		0.0198	B	SW02	4/15	0.003 - 0.005	0.0198	0.0054	NF	NC	0	0	YES NTX
75-01-4	Vinyl Chloride	0.002	J	0.009	J	SW02	5/20	0.002 - 0.01	0.009	0.008	0.002	C	0.002	SCDHEC R. 61-68	YES ASL
1330-20-7	Zinc	0.0081	B	0.125		SW02	14/23	0.0089 - 0.02	0.125	0.0331	9.1	NC	0	0	NO BSL

(1) Minimum/maximum detected concentration.

(2) Background value is two times the mean concentration or one-half of the Practical Quantitation Limit (PQL) for analytes that were below detection limits (BDL)

(3) May 1, 1986. U.S. Environmental Protection Agency Quality Criteria for Water, EPA 440/5-86-001

(4) Rationale Codes Selection Reason: Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason: Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5) The noted screening values are based on closely related surrogates as follows:

Thallium based on Thallic oxide

Chromium based on Chromium VI

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

B = Analyte detected in associated method blank

X = Data entered manually into report-generating software

* = Duplicated analysis not within control limit

J = Estimated Value

C = Carcinogenic

N = Noncarcinogenic

NF = Not Found

SCDHEC R. 61-68 = South Carolina Water Classifications and Standards (SCDHEC, 1998)

TABLE 2.6
OCCURRENCE, DISTRIBUTION AND SELECTION OF AIR CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1 AND EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Current/Future	
Medium:	Air	
Exposure Medium:	Air	
Exposure Point:	Exposure Unit 1 or 2	

CAS Number	Chemical	Minimum Concentration (mg/m³)	(1) Minimum Qualifier	Maximum Concentration (mg/m³)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/m³)	Concentration Used for Screening (mg/m³)	Background Value (mg/m³)	(2)	Screening Toxicity Value (mg/m³)	(3) Potential ARAR/TBC Value (mg/m³)	Potential ARAR/TBC Source	POTPC Flag	Rationale for Contaminant Deletion or Selection	(4)
71-43-2	Benzene	N/A	N/A	7.176E-04	N/A	Fenceline	N/A	N/A	7.18E-04			2.50E-04	C	1.50E-01	SC DHEC, 1992	YES	ASL
74-83-9	Bromomethane	N/A	N/A	1.000E-06	N/A	Fenceline	N/A	N/A	1.00E-06			5.20E-01	NC	1.00E-01	SC DHEC, 1992	NO	BSL
56-23-5	Carbon tetrachloride	N/A	N/A	3.500E-06	N/A	Fenceline	N/A	N/A	3.50E-06			1.30E-04	C	1.50E-01	SC DHEC, 1992	NO	BSL
108-90-7	Chlorobenzene	N/A	N/A	6.100E-06	N/A	Fenceline	N/A	N/A	6.10E-06			6.20E+00	NC	1.73E+00	SC DHEC, 1992	NO	BSL
75-00-3	Chloroethane	N/A	N/A	3.800E-05	N/A	Fenceline	N/A	N/A	3.80E-05			2.30E-03	C	2.64E+01	SC DHEC, 1992	NO	BSL
67-66-3	Chloroform	N/A	N/A	1.100E-06	N/A	Fenceline	N/A	N/A	1.10E-06			3.10E-02	NC	2.50E-01	SC DHEC, 1992	NO	BSL
74-87-3	Chloromethane	N/A	N/A	1.400E-06	N/A	Fenceline	N/A	N/A	1.40E-06			1.10E-03	C	5.15E-01	SC DHEC, 1992	NO	BSL
106-93-4	Dibromoethane, 1,2-	N/A	N/A	2.000E-06	N/A	Fenceline	N/A	N/A	2.00E-06			9.00E-06	C	7.70E-01	SC DHEC, 1992	NO	BSL
76-14-2	Dichloro-1,1,2,2-tetrafluoroethane, 1,2-	N/A	N/A	1.510E-05	N/A	Fenceline	N/A	N/A	1.51E-05			3.10E+03	(5)	NC	NF	NO	BSL
95-50-1	Dichlorobenzene, 1,2-	N/A	N/A	1.600E-06	N/A	Fenceline	N/A	N/A	1.60E-06			2.10E+01	NC	4.50E+00	SC DHEC, 1992	NO	BSL
541-73-1	Dichlorobenzene, 1,3-	N/A	N/A	1.170E-05	N/A	Fenceline	N/A	N/A	1.17E-05			3.30E-01	NC	4.50E+00	SC DHEC, 1992	NO	BSL
106-46-7	Dichlorobenzene, 1,4-	N/A	N/A	1.220E-05	N/A	Fenceline	N/A	N/A	1.22E-05			3.10E-04	C	4.50E+00	SC DHEC, 1992	NO	BSL
75-71-8	Dichlorodifluoromethane	N/A	N/A	6.560E-05	N/A	Fenceline	N/A	N/A	6.56E-05			2.10E+01	NC	NF	NO	BSL	
75-34-3	Dichloroethane, 1,1-	N/A	N/A	1.339E-04	N/A	Fenceline	N/A	N/A	1.34E-04			5.20E+01	NC	2.03E+00	SC DHEC, 1992	NO	BSL
107-06-2	Dichloroethane, 1,2-	N/A	N/A	1.700E-06	N/A	Fenceline	N/A	N/A	1.70E-06			7.40E-05	C	2.00E-01	SC DHEC, 1992	NO	BSL
75-35-4	Dichloroethene, 1,1-	N/A	N/A	1.890E-05	N/A	Fenceline	N/A	N/A	1.89E-05			3.80E-05	C	9.90E-02	SC DHEC, 1992	NO	BSL
156-59-2	Dichloroethene, 1,2- (cis)	N/A	N/A	1.027E-04	N/A	Fenceline	N/A	N/A	1.03E-04			3.70E+00	NC	NF	NO	BSL	
78-87-5	Dichloropropane, 1,2-	N/A	N/A	1.200E-06	N/A	Fenceline	N/A	N/A	1.20E-06			9.90E-05	C	1.75E+00	SC DHEC, 1992	NO	BSL
10061-01-5	Dichloropropene, 1,3- (cis)	N/A	N/A	1.200E-06	N/A	Fenceline	N/A	N/A	1.20E-06			5.20E-05	(5)	C	NF	NO	BSL
10061-02-6	Dichloropropene, 1,3- (trans)	N/A	N/A	1.200E-06	N/A	Fenceline	N/A	N/A	1.20E-06			5.20E-05	(5)	C	NF	NO	BSL
100-41-4	Ethylbenzene	N/A	N/A	8.460E-05	N/A	Fenceline	N/A	N/A	8.46E-05			1.10E+02	NC	4.35E+00	SC DHEC, 1992	NO	BSL
87-68-3	Hexachlorobutadiene	N/A	N/A	2.800E-06	N/A	Fenceline	N/A	N/A	2.80E-06			7.30E-02	NC	1.20E-03	SC DHEC, 1992	NO	BSL
75-09-2	Methylene chloride	N/A	N/A	1.000E-04	N/A	Fenceline	N/A	N/A	1.00E-04			4.10E-03	C	8.75E+00	SC DHEC, 1992	NO	BSL
100-42-5	Styrene	N/A	N/A	1.400E-06	N/A	Fenceline	N/A	N/A	1.40E-06			1.10E+02	NC	5.33E+00	SC DHEC, 1992	NO	BSL
79-34-5	Tetrachloroethane, 1,1,2,2-	N/A	N/A	1.800E-06	N/A	Fenceline	N/A	N/A	1.80E-06			3.30E-05	C	3.50E-02	SC DHEC, 1992	NO	BSL
127-18-4	Tetrachloroethene	N/A	N/A	3.990E-05	N/A	Fenceline	N/A	N/A	3.99E-05			3.30E-03	C	3.35E+00	SC DHEC, 1992	NO	BSL
108-88-3	Toluene	N/A	N/A	2.925E-04	N/A	Fenceline	N/A	N/A	2.93E-04			4.00E+01	NC	2.00E-01	SC DHEC, 1992	NO	BSL
76-13-1	Trichloro-1,2,2-trifluoroethane, 1,1,2-	N/A	N/A	9.760E-05	N/A	Fenceline	N/A	N/A	9.76E-05			3.10E+03	NC	NF	NO	BSL	
120-82-1	Trichlorobenzene, 1,2,4-	N/A	N/A	2.000E-06	N/A	Fenceline	N/A	N/A	2.00E-06			2.10E+01	NC	4.00E-01	SC DHEC, 1992	NO	BSL
71-55-6	Trichloroethane, 1,1,1-	N/A	N/A	1.850E-05	N/A	Fenceline	N/A	N/A	1.85E-05			1.00E+02	NC	9.55E+00	SC DHEC, 1992	NO	BSL
79-00-5	Trichloroethane, 1,1,2-	N/A	N/A	1.500E-06	N/A	Fenceline	N/A	N/A	1.50E-06			1.20E-04	C	2.73E-01	SC DHEC, 1992	NO	BSL
79-01-6	Trichloroethene	N/A	N/A	2.820E-05	N/A	Fenceline	N/A	N/A	2.82E-05			1.10E-03	C	6.75E+00	SC DHEC, 1992	NO	BSL
75-69-4	Trichlorofluoromethane	N/A	N/A	6.600E-06	N/A	Fenceline	N/A	N/A	6.60E-06			7.30E+01	NC	NF	NO	BSL	
95-63-6	Trimethylbenzene, 1,2,4-	N/A	N/A	1.580E-05	N/A	Fenceline	N/A	N/A	1.58E-05			6.20E-01	NC	NF	NO	BSL	

TABLE 2.6
OCCURRENCE, DISTRIBUTION AND SELECTION OF AIR CHEMICALS OF POTENTIAL CONCERN, EXPOSURE UNIT 1 AND EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Current/Future	
Medium:	Air	
Exposure Medium:	Air	
Exposure Point:	Exposure Unit 1 or 2	

CAS Number	Chemical	(1) Minimum Concentration (mg/m³)	(1) Minimum Qualifier	(1) Maximum Concentration (mg/m³)	(1) Maximum Qualifier	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (mg/m³)	Concentration Used for Screening (mg/m³)	Background Value (mg/m³)	(2) Screening Toxicity Value (mg/m³)	(3) Potential ARAR/TBC Value (mg/m³)	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection	
108-67-8	Trimethylbenzene, 1,3,5-	N/A	N/A	1.020E-05	N/A	Fenceline	N/A	N/A	1.02E-05		6.20E-01	NC	NF	NO	BSL	
75-01-4	Vinyl chloride	N/A	N/A	7.872E-04	N/A	Fenceline	N/A	N/A	7.87E-04		2.20E-05	C	5.00E-02	SC DHEC, 1992	YES ASL	
NF	Xylene, m,p-	N/A	N/A	3.910E-05	N/A	Fenceline	N/A	N/A	3.91E-05		7.30E+01 (5)	NC	4.35E+00	SC DHEC, 1992	NO	BSL
95-47-6	Xylene, o-	N/A	N/A	2.710E-05	N/A	Fenceline	N/A	N/A	2.71E-05		7.30E+01 (5)	NC	4.35E+00	SC DHEC, 1992	NO	BSL

(1)Minimum/maximum detected concentration.

(2)No background information is available for air.

(3)November 22, 2000. Region IX PRG Table. Lower of the residential values at HI of 0.1 for noncarcinogenic effects (NC) and 1E-06 risk for carcinogenic effects (C).

(4)Rationale Codes Selection Reason: Toxicity Information Available (TX)

Above Screening Levels (ASL)

No Toxicity Information (NTX)

Deletion Reason: Background Levels (BKG)

Essential Nutrient (NUT)

Below Screening Level (BSL)

(5)The noted screening values are based on closely related surrogates as follows:

cis/trans 1,3-Dichloropropene based on 1,3-Dichloropropene

1,2-Dichloro-1,1,2,2-tetrafluoroethane based on 1,1,2-Trichloro-1,2,2-trifluoroethane

o, m, p-Xylene based on Xylenes

Definitions: N/A = Not Applicable

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

C = Carcinogenic effects

NC = Noncarcinogenic effects

NF = Not Found

SC DHEC, 1992 = South Carolina Air Pollution Regulations, Standard No. 8

Table 3 Series
Medium-Specific Exposure Point Concentration Summary

TABLE 3.1a
EXPOSURE POINT CONCENTRATION SUMMARY, SURFACE SOIL, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium:		Current Surface Soil Surface Soil		Reasonable Maximum Exposure			
Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/kg)	95% UCL-T Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Maximum Qualifier	Medium EPC Value (mg/kg)	Medium EPC Statistic
Exposure Unit 1	Aldrin	0.0044	0.0065	0.055	N	0.0065	95% UCL-T
Exposure Unit 1	Aluminum	44,211 (N)	47,785 (N)	84,900		47,785	95% UCL-N
Exposure Unit 1	Antimony	1.9	2.3	15.3		2.3	95% UCL-T
Exposure Unit 1	Aroclor-1242	0.081	0.12	0.34		0.12	95% UCL-T
Exposure Unit 1	Aroclor-1248	N/A	N/A	0.30		0.30	Maximum
Exposure Unit 1	Aroclor-1254	0.16	0.28	35		0.28	95% UCL-T
Exposure Unit 1	Arsenic	2.3	3.1	65.6		3.1	95% UCL-T
Exposure Unit 1	Barium	1,181	1,668	3,300		1,668	95% UCL-T
Exposure Unit 1	Benzo(a)anthracene	0.45	0.57	0.37		0.37	Maximum
Exposure Unit 1	Benzo(a)pyrene	0.45	0.58	0.73		0.58	95% UCL-T
Exposure Unit 1	Benzo(b)fluoranthene	0.46	0.59	1.1		0.59	95% UCL-T
Exposure Unit 1	Benzo(k)fluoranthene	0.45	0.57	0.41		0.41	Maximum
Exposure Unit 1	Bis(2-ethylhexyl)phthalate	4.9	11	120		11	95% UCL-T
Exposure Unit 1	Cadmium	5.6	9.1	68.1		9.1	95% UCL-T
Exposure Unit 1	Chromium	91	111	339		111	95% UCL-T
Exposure Unit 1	Chrysene	0.45	0.58	0.43		0.43	Maximum
Exposure Unit 1	Copper	81	116	986		116	95% UCL-T
Exposure Unit 1	Cyanide, total	2.8	3.5	74.7		3.5	95% UCL-T
Exposure Unit 1	Iron	41,444	45,866	56,300		45,866	95% UCL-T
Exposure Unit 1	Lead	77	98	1,290		98	95% UCL-T
Exposure Unit 1	Manganese	528 (N)	584 (N)	1,240		584	95% UCL-N
Exposure Unit 1	Mercury	3.4	7.3	72.6		7.3	95% UCL-T
Exposure Unit 1	Naphthalene	0.81	1.5	22		1.5	95% UCL-T
Exposure Unit 1	Nickel	42	53	1,180		53	95% UCL-T
Exposure Unit 1	Tetrachloroethene	0.040	0.080	25		0.080	95% UCL-T
Exposure Unit 1	Thallium	0.83 (N)	0.91 (N)	1.8		0.9	95% UCL-N
Exposure Unit 1	Toxaphene	0.40	0.58	6.8		0.58	95% UCL-T
Exposure Unit 1	Trichloroethene	0.044	0.098	21.2		0.10	95% UCL-T
Exposure Unit 1	Vanadium	128	147	195		147	95% UCL-T

Statistics: Mean-T (log-transformed arithmetic mean); 95% UCL-T (log-transformed 95% UCL); 95% UCL-N (95% UCL of normal data).

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

(N) indicates that the arithmetic mean and 95% UCL concentrations were calculated based on a normal distribution of data.

J = Estimated Value.

N = Spiked sample recovery not within control limits

P = Concentration difference between GC columns >25%

S = Value was determined by method of standard additions

* = Duplicated analysis not within control limit

TABLE 3.1b
EXPOSURE POINT CONCENTRATION SUMMARY, SURFACE SOIL , EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium:		Current Surface Soil Surface Soil						
Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/kg)	95% UCL-T Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/kg)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 2	Iron	22,500 (N)	27,800 (N)	40,000		27,800	95% UCL-N	
Exposure Unit 2	Manganese	74	254	328		254	95% UCL-T	
Exposure Unit 2	Thallium	0.61 (N)	0.77 (N)	1.2		0.77	95% UCL-N	
Exposure Unit 2	Vanadium	58 (N)	76 (N)	112		76	95% UCL-N	

Statistics: Mean-T (log-transformed arithmetic mean); 95% UCL-T (log-transformed 95% UCL); 95% UCL-N (95% UCL of normal data).

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

(N) indicates that the arithmetic mean and 95% UCL concentrations were calculated based on a normal distribution of data.

TABLE 3.2a
EXPOSURE POINT CONCENTRATION SUMMARY, SUBSURFACE SOIL, EXPOSURE UNIT 1
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Subsurface Soil

Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/kg)	95% UCL-T Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/kg)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 1	Aroclor 1242	0.42	4.0	19		4.0	95% UCL-T	
Exposure Unit 1	Aroclor 1248	0.11	0.31	0.81	Pn	0.31	95% UCL-T	
Exposure Unit 1	Aroclor 1254	0.11	0.31	0.76		0.31	95% UCL-T	
Exposure Unit 1	Arsenic	2.4	4.1	10		4.1	95% UCL-T	
Exposure Unit 1	Benzo(a)anthracene	0.59	0.98	1.9	J	0.98	95% UCL-T	
Exposure Unit 1	Benzo(a)pyrene	0.52	0.78	0.55	J	0.55	Maximum	UCL > Max
Exposure Unit 1	Benzo(b)fluoranthene	0.55	0.84	0.84		0.84	95% UCL-T	
Exposure Unit 1	Benzo(k)fluoranthene	0.67	1.2	0.73	J	0.73	Maximum	UCL > Max
Exposure Unit 1	Chromium	62.5	84	145		84	95% UCL-T	
Exposure Unit 1	Chrysene	0.56	0.87	3.4	J	0.87	95% UCL-T	
Exposure Unit 1	Dichloroethene, 1,1-	0.36	2.9	0.27	J	0.27	Maximum	UCL > Max
Exposure Unit 1	Dichloroethene, cis-1,2-	0.087	0.29	172		0.29	95% UCL-T	
Exposure Unit 1	Indeno(1,2,3-cd)pyrene	0.67	1.2	0.64		0.64	Maximum	UCL > Max
Exposure Unit 1	Iron	39,957	43,820	63,000		43,820	95% UCL-T	
Exposure Unit 1	Tetrachloroethene	14	124	700	D	124	95% UCL-T	
Exposure Unit 1	Thallium	3.4	12	343		12	95% UCL-T	
Exposure Unit 1	Toluene	1.5	7.6	412		7.6	95% UCL-T	
Exposure Unit 2	Trichloroethene	6.5	50	1,020		50	95% UCL-T	

Statistics: 95% UCL-T (log-transformed 95% UCL)

D=Results from diluted sample.

J=Estimated value

P=Sample vial used in previous analysis

n=Multi-component target compound exhibited marginal pattern-matching quality

TABLE 3.2b
EXPOSURE POINT CONCENTRATION SUMMARY, SUBSURFACE SOIL, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Subsurface Soil

Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/kg)	95% UCL-T Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/kg)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 2	Arsenic	N/A	N/A	6.6		6.6	Maximum	<10 samples

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

TABLE 3.3
EXPOSURE POINT CONCENTRATION SUMMARY, SEDIMENT, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium:		Current Sediment Sediment						
Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/kg)	95% UCL-T Concentration (mg/kg)	Maximum Detected Concentration (mg/kg)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/kg)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 2	Aluminum	8,775	17,251	31,300	G	17,251	95% UCL-T	
Exposure Unit 2	Antimony	1.5	2.9	6.2	B	2.9	95% UCL-T	
Exposure Unit 2	Aroclor-1248	0.025	0.035	0.17		0.035	95% UCL-T	
Exposure Unit 2	Aroclor-1254	0.026	0.033	0.12		0.033	95% UCL-T	
Exposure Unit 2	Arsenic	1.1	2.3	5.3		2.3	95% UCL-T	
Exposure Unit 2	Barium	118	688	937		688	95% UCL-T	
Exposure Unit 2	Benzo(a)anthracene	N/A	N/A	0.15	J	0.15	Maximum	< 10 Samples
Exposure Unit 2	Benzo(a)pyrene	N/A	N/A	0.16	J	0.16	Maximum	< 10 Samples
Exposure Unit 2	Benzo(b)fluoranthene	N/A	N/A	0.16	J	0.16	Maximum	< 10 Samples
Exposure Unit 2	Benzo(k)fluoranthene	N/A	N/A	0.14	J	0.14	Maximum	< 10 Samples
Exposure Unit 2	Chromium	22	43	77	J	43	95% UCL-T	
Exposure Unit 2	Chrysene	N/A	N/A	0.17	G	0.17	Maximum	< 10 Samples
Exposure Unit 2	Iron	10,869	23,760	37,100	G	23,760	95% UCL-T	
Exposure Unit 2	Manganese	184	759	2,600		759	95% UCL-T	
Exposure Unit 2	Mercury	0.12	0.41	3.6		0.41	95% UCL-T	
Exposure Unit 2	Thallium	N/A	N/A	3.2		3.2	Maximum	< 10 Samples
Exposure Unit 2	Vanadium	23	61	105	G	61	95% UCL-T	

Statistics: Mean-T (log-transformed arithmetic mean); 95% UCL-T (log-transformed 95% UCL).

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

J = Estimated Value.

G = Duplicated analysis not within control limits

B = Analyte detected in associated method blank

TABLE 3.4
EXPOSURE POINT CONCENTRATION SUMMARY, GROUNDWATER , EXPOSURE UNIT 1 AND EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Medium: Exposure Medium:		Future Groundwater Groundwater						
Exposure Point	Chemical of Potential Concern	Arithmetic Mean Concentration (mg/L)	95% UCL-T Concentration (mg/L)	Maximum Detected Concentration (mg/L)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/L)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 1 and 2	Aluminum	1.9	N/A	43.1		1.9	Mean	
Exposure Unit 1 and 2	Antimony	0.0065	N/A	0.0062	B	0.0062	Maximum	Mean>Max
Exposure Unit 1 and 2	Arsenic	0.0050	N/A	0.0287		0.0050	Mean	
Exposure Unit 1 and 2	Barium	0.27	N/A	0.52		0.27	Mean	
Exposure Unit 1 and 2	Benzene	0.021	N/A	0.054		0.021	Mean	
Exposure Unit 1 and 2	Bis(2-ethylhexyl)phthalate	0.0051	N/A	0.011		0.0051	Mean	
Exposure Unit 1 and 2	Bromodichloromethane	0.0079	N/A	0.00025	J	0.00025	Maximum	Mean>Max
Exposure Unit 1 and 2	Carbon tetrachloride	0.0079	N/A	0.002	J	0.0020	Maximum	Mean>Max
Exposure Unit 1 and 2	Chlorobenzene	0.0076	N/A	0.023		0.0076	Mean	
Exposure Unit 1 and 2	Chloroethane	0.015	N/A	0.18		0.015	Mean	
Exposure Unit 1 and 2	Chloroform	0.012	N/A	0.079		0.012	Mean	
Exposure Unit 1 and 2	Chromium	0.0078	N/A	0.026		0.0078	Mean	
Exposure Unit 1 and 2	Cobalt	0.032	N/A	0.23		0.032	Mean	
Exposure Unit 1 and 2	Dichlorobenzene, 1,4-	0.0083	N/A	0.01	B	0.0083	Mean	
Exposure Unit 1 and 2	Dichloroethane, 1,1-	0.053	N/A	0.14		0.053	Mean	
Exposure Unit 1 and 2	Dichloroethane, 1,2-	0.013	N/A	0.028	J	0.013	Mean	
Exposure Unit 1 and 2	Dichloroethene, 1,1-	0.018	N/A	0.094		0.018	Mean	
Exposure Unit 1 and 2	Dichloroethene, 1,2- (cis)	0.41	N/A	0.97		0.41	Mean	
Exposure Unit 1 and 2	Dichloroethene, 1,2- (trans)	0.0044	N/A	0.0039	J	0.0039	Maximum	Mean>Max
Exposure Unit 1 and 2	Iron	5.1	N/A	95.4		5.1	Mean	
Exposure Unit 1 and 2	Manganese	12	N/A	2.9		2.9	Maximum	Mean>Max
Exposure Unit 1 and 2	Methyl tert butyl ether	0.061	N/A	0.016		0.016	Maximum	Mean>Max
Exposure Unit 1 and 2	Tetrachloroethane, 1,1,2,2-	0.015	N/A	0.036	J	0.015	Mean	
Exposure Unit 1 and 2	Tetrachloroethene	0.11	N/A	1.2		0.11	Mean	
Exposure Unit 1 and 2	Thallium	0.0073	N/A	0.0092		0.0073	Mean	
Exposure Unit 1 and 2	Trichloroethane, 1,1,1-	0.072	N/A	0.26	B	0.072	Mean	
Exposure Unit 1 and 2	Trichloroethene	0.33	N/A	0.64		0.33	Mean	
Exposure Unit 1 and 2	Vanadium	0.0040	N/A	0.028		0.0040	Mean	
Exposure Unit 1 and 2	Vinyl chloride	0.031	N/A	0.084	B	0.031	Mean	

Statistics: Mean-T (log-transformed arithmetic mean); 95% UCL-T (log-transformed 95% UCL).

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

J = Estimated value

D=Results from diluted sample.

P=Sample vial used in previous analysis

TABLE 3.5
EXPOSURE POINT CONCENTRATION SUMMARY, SURFACE WATER, EXPOSURE UNIT 2
AQUA-TECH SITE

Scenario Timeframe: Current Medium: Surface Water Exposure Medium: Surface Water								
Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/L)	95% UCL-T Concentration (mg/L)	Maximum Detected Concentration (mg/L)	Maximum Qualifier	Reasonable Maximum Exposure		
						Medium EPC Value (mg/L)	Medium EPC Statistic	Medium EPC Rationale
Exposure Unit 2	Acetone	0.0049	0.0067	0.016		0.0067	95% UCL-T	
Exposure Unit 2	Aluminum	0.33	1.1	4.17		1.1	95% UCL-T	
Exposure Unit 2	Benzene	N/A	N/A	0.002	J	0.002	Maximum	< 10 Samples
Exposure Unit 2	Cadmium	0.0034	0.24	3.47		0.24	95% UCL-T	
Exposure Unit 2	Chloroform	N/A	N/A	0.001	J	0.001	Maximum	< 10 Samples
Exposure Unit 2	Cobalt	0.0088	0.061	0.0437	B	0.0437	Maximum	UCL > Max
Exposure Unit 2	Di-n-butylphthalate	N/A	N/A	0.001	BJ	0.001	Maximum	< 10 Samples
Exposure Unit 2	Dichloroethane, 1,1-	0.0027	0.0084	0.01		0.0084	95% UCL-T	
Exposure Unit 2	Dichloroethene, 1,2- (total)	0.0042	0.023	0.085		0.023	95% UCL-T	
Exposure Unit 2	Dieldrin	N/A	N/A	0.000037	JX	0.000037	Maximum	< 10 Samples
Exposure Unit 2	Iron	1.2	3.4	10.5		3.4	95% UCL-T	
Exposure Unit 2	Manganese	0.35	50	7.22		7.22	Maximum	UCL > Max
Exposure Unit 2	Mercury	0.0001	0.0002	0.001		0.0002	95% UCL-T	
Exposure Unit 2	Nickel	0.014	0.12	0.10		0.10	Maximum	UCL > Max
Exposure Unit 2	Nitrophenol, 2-	N/A	N/A	0.002	J	0.002	Maximum	< 10 Samples
Exposure Unit 2	Tetrachloroethene	0.0025	0.0081	0.012		0.0081	95% UCL-T	
Exposure Unit 2	Trichloroethane, 1,1-	0.0036	0.009	0.005	J	0.005	Maximum	UCL > Max
Exposure Unit 2	Trichloroethene	0.0022	0.01	0.038		0.01	95% UCL-T	
Exposure Unit 2	Vanadium	0.003	0.0058	0.0198	B	0.0058	95% UCL-T	
Exposure Unit 2	Vinyl Chloride	0.0037	0.0061	0.009	J	0.0061	95% UCL-T	

Statistics: Mean-T (log-transformed arithmetic mean); 95% UCL-T (log-transformed 95% UCL).

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

J = Estimated value

B = Analyte detected in associated method blank

X = Data entered manually into report-generating software

TABLE 3.6
EXPOSURE POINT CONCENTRATION SUMMARY, AIR , EXPOSURE UNIT 1 AND EXPOSURE UNIT 2
AQUA-TECH SITE

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Scenario Timeframe:</td><td style="padding: 2px;">Current/Future</td></tr> <tr> <td style="padding: 2px;">Medium:</td><td style="padding: 2px;">Air</td></tr> <tr> <td style="padding: 2px;">Exposure Medium:</td><td style="padding: 2px;">Air</td></tr> </table>						Scenario Timeframe:	Current/Future	Medium:	Air	Exposure Medium:	Air			
Scenario Timeframe:	Current/Future													
Medium:	Air													
Exposure Medium:	Air													
Exposure Point	Chemical of Potential Concern	Arithmetic Mean-T Concentration (mg/m³)	95% UCL-T Concentration (mg/m³)	Maximum Detected Concentration (mg/m³)	Maximum Qualifier	Reasonable Maximum Exposure								
						Medium EPC Value (mg/m³)	Medium EPC Statistic	Medium EPC Rationale						
Exposure Unit 1 and 2	Benzene	N/A	N/A	0.0007176		0.0007176	Maximum	<10 samples						
Exposure Unit 1 and 2	Vinyl chloride	N/A	N/A	0.0007872		0.0007872	Maximum	<10 samples						

N/A: Not applicable - statistical analysis is not recommended for data sets having less than 10 samples.

Table 4 Series
Values Used for Daily Intake Calculations

TABLE 4.1a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Current/Future Trespasser/Visitor	Adolescent	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.1a and Table 7.1b See Table 3.1a and Table 3.1b	BPJ BPJ U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 2000b N/A U.S. EPA, 1995a; U.S. EPA, 1997 = ED * 365	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg			
				EF	Exposure Frequency (EU-1)	days/year	50		
					Exposure Frequency (EU-2)	days/year	100		
				ED	Exposure Duration	years	10		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Soil	mg/day	100		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	45		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.1a and Table 7.1b See Table 3.1a and Table 3.1b	BPJ BPJ U.S. EPA, 1995a U.S. EPA, 1995a See Appendix E U.S. EPA, 1992a; U.S. EPA, 1995a U.S. EPA, 1995a N/A U.S. EPA, 1995a; U.S. EPA, 1997 = ED * 365	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{SA} \times \text{AF} \times \text{DA} \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg			
				EF	Exposure Frequency	days/year	50		
					Exposure Frequency (EU-2)	days/year	100		
				ED	Exposure Duration	years	10		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				SA	Skin Surface Area available for daily contact	cm ²	3,293		
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.2		
				DA (organics)	Dermal Absorption factor for organics	--	0.01		
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	45		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		

BPJ Best Professional Judgement. Trespasser exposure frequency based on one or two days/week for 50 weeks/year or two or four days/week for half the year.

TABLE 4.1b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2a and Table 7.2b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a; U.S. EPA, 1997 N/A U.S. EPA, 1999 = ED * 365 U.S. EPA, 1989	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	250		
				ED	Exposure Duration	years	25		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Soil	mg/day	50		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2a and Table 7.2b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a See Appendix E U.S. EPA, 1992a; U.S. EPA, 1995a U.S. EPA, 1995a N/A U.S. EPA, 1999 = ED * 365 U.S. EPA, 1989	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{SA} \times \text{AF} \times \text{DA} \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	250		
				ED	Exposure Duration	years	25		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				SA	Skin Surface Area available for daily contact	cm ²	2,503		
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.3		
				DA (organics)	Dermal Absorption factor for organics	--	0.01		
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		

TABLE 4.1b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Construction Worker	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6a and Table 7.6b		
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _o	Oral Ingestion Rate for Soil	mg/day	195	U.S. EPA, 1997; BPJ (2)	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6a and Table 7.6b		
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				SA	Skin Surface Area available for daily contact	cm ²	5,000	U.S. EPA, 1997	
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.5	U.S. EPA, 1992a; U.S. EPA, 1995a	
				DA (organics)	Dermal Absorption factor for organics	--	0.01	U.S. EPA, 1995a	
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001	U.S. EPA, 1995a	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

TABLE 4.1b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.4a and Table 7.4b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a N/A U.S. EPA, 1999	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	24		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Soil	mg/day	100		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	8,760		
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.4a and Table 7.4b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a See Appendix E U.S. EPA, 1992a; U.S. EPA, 1995	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{SA} \times \text{AF} \times \text{DA} \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	24		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				SA	Skin Surface Area available for daily contact	cm ²	4,508		
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.2		
				DA (organics)	Dermal Absorption factor for organics	--	0.01		
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001		
			Child	CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	8,760		
				CDI	Chronic Daily Intake	mg/kg•day	See Table 7.3a and Table 7.3b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a N/A U.S. EPA, 1999	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	6		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Soil	mg/day	200		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	15		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	2,190		

TABLE 4.1b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Child	Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.3a and Table 7.3b		
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350	U.S. EPA, 1995a	
				ED	Exposure Duration	years	6	U.S. EPA, 1995a	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				SA	Skin Surface Area available for daily contact	cm ²	1,720	See Appendix E	
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.2	U.S. EPA, 1992a; U.S. EPA, 1995a	
				DA (organics)	Dermal Absorption factor for organics	--	0.01	U.S. EPA, 1995a	
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001	U.S. EPA, 1995a	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	15	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	2,190	= ED * 365	
	Aggregate	Ingestion		CDI	Chronic Daily Intake	mg/kg•day	See Table 7.5a and Table 7.5b		
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350	U.S. EPA, 1995a	
				ED	Exposure Duration	years	30	U.S. EPA, 1995a	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _o	Oral Ingestion Rate for Soil	mg/day	120	See Appendix E	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	59	See Appendix E	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

TABLE 4.1b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Surface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Aggregate	Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.5a and Table 7.5b		
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350	U.S. EPA, 1995a	
				ED	Exposure Duration	years	30	U.S. EPA, 1995a	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				SA	Skin Surface Area available for daily contact	cm ²	3,950	See Appendix E	
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.2	U.S. EPA, 1992a; U.S. EPA, 1995a	
				DA (organics)	Dermal Absorption factor for organics	--	0.01	U.S. EPA, 1995a	
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001	U.S. EPA, 1995a	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	59	See Appendix E	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ (1) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (2) Best Professional Judgement. Ingestion rate based on one month of intense exposure at 480 mg/day and three months at 100 mg/day.

N/A Not Applicable.

TABLE 4.1c
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Soil
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Trespasser/Visitor	Adolescent	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.1a and Table 7.1b		$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_i \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency (EU-1)	days/year	50	BPJ (1)	
					Exposure Frequency (EU-2)	days/year	100	BPJ (1)	
				ED	Exposure Duration	years	10	U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	2	BP J (2)	
				CF ₂	Conversion Factor	day/hr	0.042	Assumed 24 hr day; 1/24	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Soil	m ³ /day	13	See Appendix E	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	45	U.S. EPA, 1995a; U.S. EPA, 1997	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ (1) Best Professional Judgement. Trespasser exposure frequency based on one or two days/week for 50 weeks/year or two or four days/week for half the year.

BPJ (2) Best Professional Judgement. Trespasser exposure time based on two hours/Site visit.

TABLE 4.1d
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day			
				CS	Concentration in Soil	mg/kg			
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	25	U.S. EPA, 1995a	
				ET	Exposure Time (EU-1)	hr/day	2	BP J (1)	
				ET	Exposure Time (EU-2)	hr/day	8	BP J (1)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8 hr workday; 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Soil	m ³ /day	12.8	See Appendix E	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
	Construction Worker	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day			
				CS	Concentration in Soil	mg/kg			
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (2)	
				ET	Exposure Time	hr/day	8	BPJ (3)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8 hr workday; 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Soil	m ³ /day	20	U.S. EPA, 1997a	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

TABLE 4.1d
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.4a and Table 7.4b	U.S. EPA, 1995a U.S. EPA, 1995a BPJ (4) Assumed 24 hr day; 1/24 U.S. EPA, 1995a See Appendix E See Appendix E See Appendix E U.S. EPA, 1999 = ED * 365	$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_i \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	24		
				ET	Exposure Time	hr/day	24		
				CF ₂	Conversion Factor	day/hr	0.042		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _i	Inhalation Rate for Soil	m ³ /day	13.25		
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific		
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	8,760		
		Child	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.3a and Table 7.3b	U.S. EPA, 1995a U.S. EPA, 1995a BPJ (4) Assumed 24 hr day; 1/24 U.S. EPA, 1995a See Appendix E See Appendix E See Appendix E U.S. EPA, 1999 = ED * 365	$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_i \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Soil	mg/kg	See Table 3.1a and Table 3.1b		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	6		
				ET	Exposure Time	hr/day	24		
				CF ₂	Conversion Factor	day/hr	0.042		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _i	Inhalation Rate for Soil	m ³ /day	8.08		
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific		
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific		
				BW	Body Weight	kg	15		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	2,190		

TABLE 4.1d
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Surface Soil
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Aggregate	Inhalation	CDI	Chronic Daily Intake	mg/kg•day			
				CS	Concentration in Soil	mg/kg			
				EF	Exposure Frequency	days/year	350	See Table 7.5a and Table 7.5b U.S. EPA, 1995a	
				ED	Exposure Duration	years	30	See Table 3.1a and Table 3.1b U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	24	BPJ (4)	
				CF ₂	Conversion Factor	day/hr	0.042	Assumed 24 hr day; 1/24	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR ₁	Inhalation Rate for Soil	m ³ /day	12.22	See Appendix E	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	59	See Appendix E	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ (1) Best Professional Judgement. Exposure time based on two hours/day in EU-1 and 8 hours/day in EU-2 based on future development plans.

BPJ (2) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (3) Best Professional Judgement. Exposure time based on typical 8-hr workday.

BPJ (4) Best Professional Judgement. Exposure time for all residents conservatively based on spending 24 hours/day at home.

TABLE 4.2a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Subsurface Soil

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Construction Worker	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.2		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _o	Oral Ingestion Rate for Soil	mg/day	195	U.S. EPA, 1997; Appendix E	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{SA} \times \text{AF} \times \text{DA} \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Soil	mg/kg	See Table 3.2		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				SA	Skin Surface Area available for daily contact	cm ²	5,000	U.S. EPA, 1997	
				AF	Soil-to-skin Adherence Factor	mg/cm ² /day	0.5	U.S. EPA, 1992a; U.S. EPA, 1995a	
				DA (organics)	Dermal Absorption factor for organics	--	0.01	U.S. EPA, 1995a	
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001	U.S. EPA, 1995a	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.
N/A Not Applicable.

TABLE 4.2b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Subsurface Soil
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Construction Worker	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_i \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Soil	mg/kg	See Table 3.2		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				ET	Exposure Time	hr/day	8	BPJ (2)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8 hr day: 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Soil	m ³ /day	20	U.S. EPA, 1997	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Soil Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ (1) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (2) Best Professional Judgement. Exposure time based on typical 8-hr workday.

TABLE 4.3a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Selected Exposure Unit 2 locations	Trespasser/Visitor	Adolescent	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2b	BPJ U.S. EPA, 1995a U.S. EPA, 1995a; U.S. EPA, 1997 N/A U.S. EPA, 1995a; U.S. EPA, 1997 = ED * 365	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	100		
				ED	Exposure Duration	years	10		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Sediment	mg/day	100		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	45		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		
	Dermal			CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2b	BPJ U.S. EPA, 1995a See Appendix E U.S. EPA, 1992a; U.S. EPA, 1995a	$\text{CDI} = \frac{\text{CS} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{SA} \times \text{AF} \times \text{DA} \times \text{CF}_1}{\text{BW} \times \text{AT}}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	100		
				ED	Exposure Duration	years	10		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				SA	Skin Surface Area available for daily contact	cm ²	3,293	N/A U.S. EPA, 1995a U.S. EPA, 1995a	
				AF	Sediment-to-skin Adherence Factor	mg/cm ² /day	0.2		
				DA (organics)	Dermal Absorption factor for organics	--	0.01		
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001		
				CF ₁	Conversion Factor	kg/mg	1.0E-06		
				BW	Body Weight	kg	45		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		

NOTE: Sediment exposure to humans conservatively set equivalent to surface soil exposure (U.S. EPA, 1995a).

BPJ Best Professional Judgement. Trespasser/visitor exposure frequency based on two days/week for 50 weeks/year or 4 days/week for half the year.

N/A Not Applicable.

TABLE 4.3b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 2 location	Construction Worker	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$CDI = \frac{CS \times EF \times ED \times FC \times IR_o \times CF_1}{BW \times AT}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	0.1	BPJ (2)	
				IR _o	Oral Ingestion Rate for Sediment	mg/day	195	U.S. EPA, 1997; BPJ (3)	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$CDI = \frac{CS \times EF \times ED \times FC \times SA \times AF \times DA \times CF_1}{BW \times AT}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	0.1	BPJ (2)	
				SA	Skin Surface Area available for daily contact	cm ²	5,000	U.S. EPA, 1997	
				AF	Sediment-to-skin Adherence Factor	mg/cm ² /day	0.5	U.S. EPA, 1992a; U.S. EPA, 1995a	
				DA (organics)	Dermal Absorption factor for organics	--	0.01	U.S. EPA, 1995a	
				DA (inorganics)	Dermal Absorption factor for inorganics	--	0.001	U.S. EPA, 1995a	
				CF ₁	Conversion Factor	kg/mg	1.0E-06	N/A	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

NOTE: Sediment exposure to humans conservatively set equivalent to surface soil exposure (U.S. EPA, 1995a).

BPJ (1) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (2) Best Professional Judgement. Fraction Contacted for sediment assumed to be 10%, based on limited area of impact and unlikely construction area.

BPJ (3) Best Professional Judgement. Ingestion rate based on one month of intense exposure at 480 mg/day and three months at 100 mg/day.

N/A Not Applicable.

TABLE 4.3c
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Selected Exposure Unit 2 locations	Trespasser/Visitor	Adolescent	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2b		$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_I \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	100	BPJ (1)	
				ED	Exposure Duration	years	10	U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	2	BPJ (2)	
				CF ₂	Conversion Factor	day/hr	0.042	Assumed 24 hr day; 1/24	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _I	Inhalation Rate for Sediment	m ³ /day	13	See Appendix E	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Sediment Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	45	U.S. EPA, 1995a; U.S. EPA, 1997	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

NOTE: Sediment exposure to humans conservatively set equivalent to surface soil exposure (U.S. EPA, 1995a).

BPJ (1) Best Professional Judgement. Trespasser exposure frequency based on two days/week for 50 weeks/year or 4 days/week for half the year.

BPJ (2) Best Professional Judgement. Trespasser exposure time based on two hours/Site visit.

TABLE 4.3d
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Sediment
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 2 location	Construction Worker	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6b		$CDI = \frac{CS \times EF \times ED \times ET \times CF_2 \times FC \times IR_i \times \frac{1}{PEF} + \frac{1}{VF_s}}{BW \times AT}$
				CS	Concentration in Sediment	mg/kg	See Table 3.3		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	0.33	BPJ (1)	
				ET	Exposure Time	hr/day	8	BPJ (2)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8 hr workday; 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source	--	0.1	BPJ (3)	
				IR _i	Inhalation Rate for Sediment	m ³ /day	20	U.S. EPA, 1997a	
				PEF	Particulate Emission Factor	m ³ /kg	Chem-Specific	See Appendix E	
				VF _s	Sediment Volatilization Factor	m ³ /kg	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

NOTE: Sediment exposure to humans conservatively set equivalent to surface soil exposure (U.S. EPA, 1995a).

BPJ (1) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (2) Best Professional Judgement. Exposure time based on typical 8-hr workday.

BPJ (3) Best Professional Judgement. Fraction Contacted for sediment assumed to be 10%, based on limited area of impact and unlikely construction area.

TABLE 4.4a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location (groundwater sprayed on ground surface)	Other Worker (Irrigation Maint)	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Tables 7.7a and Table 7.7b	BPJ (1) U.S. EPA, 1995a U.S. EPA, 1995a .01 L/hr (U.S. EPA, 1995a) for 2 hr (BPJ(2)) U.S. EPA, 1999 = ED * 365 U.S. EPA, 1989	$\text{CDI} = \frac{\text{CW} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o}{\text{BW} \times \text{AT}}$
				CW	Concentration in Water	mg/L	See Table 3.4		
				EF	Exposure Frequency	days/year	32		
				ED	Exposure Duration	years	25		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Water - Incidental	L/day	0.02		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Tables 7.7a and Table 7.7b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a BPJ (2) U.S. EPA, 1997 See Appendix E N/A U.S. EPA, 1999 = ED * 365 U.S. EPA, 1989	$\text{CDI} = \frac{\text{CW} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{ET} \times \text{SA} \times \text{PC} \times \text{CF}_3}{\text{BW} \times \text{AT}}$
				CW	Concentration in Water	mg/L	See Table 3.4		
				EF	Exposure Frequency	days/year	32		
				ED	Exposure Duration	years	25		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				ET	Exposure Time	hr/day	2		
				SA	Skin Surface Area available for daily contact	cm ²	5,000		
				PC	Dermal Permeability Coefficient	cm/hr	Chem-Specific		
				CF ₃	Conversion Factor	L/cm ³	1.0E-03		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		
Any Exposure Unit 1 or Exposure Unit 2 location (domestic use of groundwater)	Resident	Adult	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.4a and Table 7.4b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1999 = ED * 365	$\text{CDI} = \frac{\text{CW} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o}{\text{BW} \times \text{AT}}$
				CW	Concentration in Water	mg/L	See Table 3.4		
				EF	Exposure Frequency	days/year	350		
				ED	Exposure Duration	years	24		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _o	Oral Ingestion Rate for Water	L/day	2		
				BW	Body Weight	kg	70		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	8,760		

TABLE 4.4a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location (domestic use of groundwater)	Resident	Adult	Dermal	For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.					
Child		Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.3a and Table 7.3b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1999 = ED * 365	$CDI = \frac{CW \times EF \times ED \times FC \times IR_o}{BW \times AT}$	
			CW	Concentration in Water	mg/L	See Table 3.4			
			EF	Exposure Frequency	days/year	350			
			ED	Exposure Duration	years	6			
			FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1			
			IR _o	Oral Ingestion Rate for Water	L/day	1			
			BW	Body Weight	kg	15			
			AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	2,190			
		Dermal	For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.						
Aggregate		Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.5a and Table 7.5b	U.S. EPA, 1995a U.S. EPA, 1995a U.S. EPA, 1995a See Appendix E See Appendix E U.S. EPA, 1989	$CDI = \frac{CW \times EF \times ED \times FC \times IR_o}{BW \times AT}$	
			CW	Concentration in Water	mg/L	See Table 3.4			
			EF	Exposure Frequency	days/year	350			
			ED	Exposure Duration	years	30			
			FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1			
			IR _o	Oral Ingestion Rate for Water	L/day	1.8			
			BW	Body Weight	kg	59			
			AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550			
		Dermal	For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.						

BPJ (1) Best Professional Judgement. Thirty-two days per year represents one day per week for the period March 1 through October 31.

BPJ (2) Best Professional Judgement. Two hours per day assumed for a worker to be in contact with water while maintaining an irrigation system.

N/A Not Applicable.

TABLE 4.4b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 1 or Exposure Unit 2 location (groundwater sprayed on ground surface)	Other Worker (Irrigation Maint)	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg • day	See Tables 7.7a and Table 7.7b		
				CW	Concentration in Water	mg/L	See Tables 3.4a and Table 3.4b		$CDI = \frac{CW \times EF \times ED \times FC \times ET \times CF_2 \times IR_i \times \frac{1}{GW_v}}{BW \times AT}$
				EF	Exposure Frequency	days/year	32	BPJ (1)	
				ED	Exposure Duration	years	25	U.S. EPA, 1995a	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	2	BPJ (2)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8-hr workday; 1/8	
				IR _i	Inhalation Rate for chemicals volatilized from water	m ³ /day	20	U.S. EPA, 1997	
				GW _v	Groundwater Volatilization factor	m ³ /L	Chem-Specific	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
Any Exposure Unit 1 or Exposure Unit 2 location (domestic use of groundwater)	Resident	Adult	Inhalation		For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.				
		Child	Inhalation		For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.				
		Aggregate	Inhalation		For VOC's, dermal and inhalation combined intake is assumed to be equivalent to an additional ingestion exposure.				

BPJ (1) Best Professional Judgement. Thirty-two days per year represents one day per week for the period March 1 through October 31.

BPJ (2) Best Professional Judgement. Two hours per day assumed for a worker to be in contact with water while maintaining an irrigation system.

TABLE 4.5a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name		
Any Exposure Unit 2 location	Trespasser/Visitor	Adolescent	Ingestion	CDI	Chronic Daily Intake	mg/kg•day	See Tables 7.2b	BPJ (1) U.S. EPA, 1995a U.S. EPA, 1995a .01 L/hr (U.S. EPA, 1995a) for 2 hr (BPJ(2))	$\text{CDI} = \frac{\text{CW} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{IR}_o}{\text{BW} \times \text{AT}}$		
				CW	Concentration in Water	mg/L	See Tables 3.5				
				EF	Exposure Frequency	days/year	100				
				ED	Exposure Duration	years	10				
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1				
				IR _o	Oral Ingestion Rate for Water - Incidental	L/day	0.02				
				BW	Body Weight	kg	45				
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650	= ED * 365			
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989			
			Dermal	CDI	Chronic Daily Intake	mg/kg•day	See Tables 7.2b	BPJ (1) U.S. EPA, 1995a U.S. EPA, 1995a BPJ (2) See Appendix E	$\text{CDI} = \frac{\text{CW} \times \text{EF} \times \text{ED} \times \text{FC} \times \text{ET} \times \text{SA} \times \text{PC} \times \text{CF}_3}{\text{BW} \times \text{AT}}$		
				CW	Concentration in Water	mg/L	See Tables 3.5				
				EF	Exposure Frequency	days/year	100				
				ED	Exposure Duration	years	10				
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1				
			AT-NC	ET	Exposure Time	hr/day	2	See Appendix E See Appendix E			
				SA	Skin Surface Area available for daily contact	cm ²	3,293				
				PC	Dermal Permeability Coefficient	cm/hr	Chem-Specific				
				CF ₃	Conversion Factor	L/cm ³	0.001				
				BW	Body Weight	kg	45				
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650	= ED * 365			
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989			

BPJ (1) Best Professional Judgement. Trespasser exposure frequency based on two days/week for 50 weeks/year or 4 days/week for half the year.

BPJ (2) Best Professional Judgement. Two hours per day assumed for a trespasser/visitor to be in contact with surface water.

TABLE 4.5b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference	Intake Equation/Model Name
Any Exposure Unit 2 location	Trespasser/Visitor	Adolescent	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Tables 7.2b		$CDI = \frac{CW \times EF \times ED \times FC \times ET \times CF_2 \times IR_i \times \frac{1}{SW_v}}{BW \times AT}$

BPJ (1) Best Professional Judgement. Trespasser exposure frequency based on one or two days/week for 50 weeks/year or two or four days/week for half the year.

BPJ (2) Best Professional Judgement. Two hours per day assumed for a trespasser/visitor to be in contact with surface water.

TABLE 4.6a
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Current/Future
Medium:	Landfill Gas
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Trespasser/Visitor	Adolescent	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.1a and Table 7.1b	U.S. EPA, 1995a BPJ (1) BPJ (2) Assumed 24 hr day; 1/24 U.S. EPA, 1995a See Appendix E U.S. EPA, 1995a; U.S. EPA, 1997 = ED * 365 U.S. EPA, 1989	$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$
				CA	Concentration in Air	mg/m ³	See Table 3.6		
				EF	Exposure Frequency (EU-1)	days/year	50		
					Exposure Frequency (EU-2)	days/year	100		
				ED	Exposure Duration	years	10		
				ET	Exposure Time	hr/day	2		
				CF ₂	Conversion Factor	day/hr	0.042		
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1		
				IR _i	Inhalation Rate for air	m ³ /day	13		
				BW	Body Weight	kg	45		
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	3,650		
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550		

BPJ (1) Best Professional Judgement. Trespasser exposure frequency based on one or two days/week for 50 weeks/year or two or four days/week for half the year.

BPJ (2) Best Professional Judgement. Trespasser exposure assumed to be 2 hours/Site visit.

TABLE 4.6b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Landfill Gas
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Commercial Worker	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.2a and Table 7.2b		$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$
				CA	Concentration in Air	mg/m ³	See Table 3.6		
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a	
				ED	Exposure Duration	years	25	U.S. EPA, 1995a	
				ET	Exposure Time (EU-1)	hr/day	2	BPJ (1)	
				ET	Exposure Time (EU-2)	hr/day	8	BPJ (1)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8-hr workday; 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for air	m ³ /day	12.8	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
				Resident	Chronic Daily Intake	mg/kg•day	See Table 7.4a and Table 7.4b		$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$
				CA	Concentration in Air	mg/m ³	See Table 3.6		
				EF	Exposure Frequency	days/year	350	U.S. EPA, 1995a	
				ED	Exposure Duration	years	24	U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	24	BPJ (2)	
				CF ₂	Conversion Factor	day/hr	0.042	Assumed 24 hr day; 1/24	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Soil	m ³ /day	13.25	See Appendix E	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	8,760	= ED * 365	

TABLE 4.6b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Landfill Gas
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name	
Any Exposure Unit 1 or Exposure Unit 2 location	Resident	Child	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.3a and Table 7.3b	U.S. EPA, 1995a U.S. EPA, 1995a BPJ (2) Assumed 24 hr day; 1/24 U.S. EPA, 1995a See Appendix E U.S. EPA, 1999 = ED * 365	$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$	
				CA	Concentration in Air	mg/m³	See Table 3.6			
				EF	Exposure Frequency	days/year	350			
				ED	Exposure Duration	years	6			
				ET	Exposure Time	hr/day	24			
				CF ₂	Conversion Factor	day/hr	0.042			
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1			
				IR _i	Inhalation Rate for Air	m³/day	8.08			
				BW	Body Weight	kg	15			
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	2,190			
	Aggregate	Inhalation		CDI	Chronic Daily Intake	mg/kg•day	See Table 7.5a and Table 7.5b	U.S. EPA, 1995a U.S. EPA, 1995a BPJ (2) Assumed 24 hr day; 1/24 U.S. EPA, 1995a See Appendix E U.S. EPA, 1999 = ED * 365	$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$	
				CA	Concentration in Air	mg/m³	See Table 3.6			
				EF	Exposure Frequency	days/year	350			
				ED	Exposure Duration	years	30			
				ET	Exposure Time	hr/day	24			
				CF ₂	Conversion Factor	day/hr	0.042			
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1			
				IR _i	Inhalation Rate for Air	m³/day	12.22			
				BW	Body Weight	kg	59			
	Construction Worker	Adult	Inhalation	AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	$\text{CDI} = \frac{\text{CA} \times \text{EF} \times \text{ED} \times \text{ET} \times \text{CF}_2 \times \text{FC} \times \text{IR}_i}{\text{BW} \times \text{AT}}$	
				CDI	Chronic Daily Intake	mg/kg•day	See Table 7.6a and Table 7.6b			
				CA	Concentration in Air	mg/m³	See Table 3.6			
				EF	Exposure Frequency	days/year	250	U.S. EPA, 1995a BPJ (3) BPJ (4)		
				ED	Exposure Duration	years	0.33			
				ET	Exposure Time	hr/day	8			
				CF ₂	Conversion Factor	day/hr	0.125			

TABLE 4.6b
VALUES USED FOR DAILY INTAKE CALCULATIONS
AQUA-TECH SITE

Scenario Timeframe:	Future
Medium:	Landfill Gas
Exposure Medium:	Air

Exposure Point	Receptor Population	Receptor Age	Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation/ Model Name
Any Exposure Unit 1 or Exposure Unit 2 location	Construction Worker	Adult	Inhalation	FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Air	m ³ /day	20	U.S. EPA, 1997	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	122	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	
	Other Worker (Irrigation Maint)	Adult	Inhalation	CDI	Chronic Daily Intake	mg/kg•day	See Table 7.7a and Table 7.7b		$C\ D\ I = \frac{CA \times EF \times ED \times ET \times CF_2 \times FC \times IR_i}{BW \times AT}$
				CA	Concentration in Air	mg/m ³	See Table 3.6		
				EF	Exposure Frequency	days/year	32	BPJ (5)	
				ED	Exposure Duration	years	25	U.S. EPA, 1995a	
				ET	Exposure Time	hr/day	2	BPJ (6)	
				CF ₂	Conversion Factor	day/hr	0.125	Assumed 8-hr workday; 1/8	
				FC	Fraction Contacted (ingested or absorbed) from contaminated source (assumed 100%)	--	1	U.S. EPA, 1995a	
				IR _i	Inhalation Rate for Air	m ³ /day	20	U.S. EPA, 1997	
				BW	Body Weight	kg	70	U.S. EPA, 1999	
				AT-NC	Averaging Time for noncarcinogens (period over which exposure is averaged)	days	9,125	= ED * 365	
				AT-C	Averaging Time for carcinogens (period over which exposure is averaged)	days	25,550	U.S. EPA, 1989	

BPJ (1) Best Professional Judgement. Exposure time based on two hours/day in EU-1 and 8 hours/day in EU-2 based on future development plans.

BPJ (2) Best Professional Judgement. Exposure time for all residents conservatively based on spending 24 hours/day at home.

BPJ (3) Best Professional Judgement. Construction duration of four months (0.33 year) assumed for early phase, intense exposure to uncovered media.

BPJ (4) Best Professional Judgement. Exposure time assumed to be 8 hours/day.

BPJ (5) Best Professional Judgement. Thirty-two days per year represents one day per week for the period March 1 through October 31.

BPJ (6) Best Professional Judgement. Exposure time assumed to be 2 hours/day.

Table 5 Series
Non-Cancer Toxicity Data

TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
AQUA-TECH SITE

Chemical of Potential Concern	Subchronic Oral RfD Value (1) (mg/kg•day)	Chronic Oral RfD Value (mg/kg•day)	Oral to Dermal Adjustment Factor (2)	Subchronic Adjusted Dermal RfD (3) (mg/kg•day)	Chronic Adjusted Dermal RfD (3) (mg/kg•day)	Primary Target Organ	Combined Uncertainty/Modifying Factors for Chronic RfD	Sources of Chronic RfD/Target Organ	Dates of RfD/Target Organ (4)
Acetone	1.0E+00	1.0E-01	0.8	8.0E-01	8.0E-02	liver, kidney	1,000	IRIS/IRIS	May 2002/May 2002
Aldrin	NF	3.0E-05	1.0	NF	3.0E-05	liver	1,000	IRIS/IRIS	May 2002/May 2002
Aluminum	NF	1.0E+00	0.04 (a)	NF	4.0E-02	CNS	NF	NCEA/DOE	April 2002/May 2002
Antimony	NF	4.0E-04	0.01 (a)	NF	4.0E-06	blood	1,000	IRIS/IRIS	May 2002/May 2002
Aroclor-1242	5.0E-05 (6)	2.0E-05 (6)	0.85 (a)	4.3E-05	1.7E-05	immunologic	300 (6)	surrogate	N/A
Aroclor-1248	5.0E-05 (6)	2.0E-05 (6)	0.85 (a)	4.3E-05	1.7E-05	immunologic	300 (6)	surrogate	N/A
Aroclor-1254	5.0E-05	2.0E-05	0.85 (a)	4.3E-05	1.7E-05	immunologic	300	IRIS/IRIS	May 2002/May 2002
Arsenic	NF	3.0E-04	0.95 (a)	NF	2.9E-04	skin	3	IRIS/IRIS	May 2002/May 2002
Barium	NF	7.0E-02	0.05	NF	3.5E-03	cardiovascular	3	IRIS/IRIS	May 2002/May 2002
Benzene	NF	3.0E-03	0.90 (a)	NF	2.7E-03	CNS, blood	NF	NCEA/DOE	April 2002/May 2002
Benzo(a)anthracene	NF	NF	0.5	NF	NF	NF	NF	NF	N/A
Benzo(a)pyrene	NF	NF	0.5	NF	NF	lung	NF	NF	N/A
Benzo(b)fluoranthene	NF	NF	0.5	NF	NF	lung	NF	NF	N/A
Benzo(k)fluoranthene	NF	NF	0.5	NF	NF	NF	NF	NF	N/A
BHC, alpha-	NF	NF	0.974 (a)	NF	NF	NF	NF	NF	N/A
Bis(2-chloroethyl)ether	NF	NF	0.98 (a)	NF	NF	NF	NF	NF	N/A
Bis(2-ethylhexyl)phthalate	NF	2.0E-02	0.5	NF	1.0E-02	kidney, liver	1,000	IRIS/IRIS	May 2002/May 2002
Bromodichloromethane	NF	2.0E-02	0.98 (a)	NF	2.0E-02	kidney	1,000	IRIS/IRIS	May 2002/May 2002
Cadmium	NF	1.0E-03 (5)	0.044 (a)	NF	4.4E-05	kidney	10	IRIS/IRIS	May 2002/May 2002
Carbon tetrachloride	NF	7.0E-04	0.85 (a)	NF	6.0E-04	liver	1,000	IRIS/IRIS	May 2002/May 2002
Chlorobenzene	NF	2.0E-02	0.31 (a)	NF	6.2E-03	liver	1,000	IRIS/IRIS	May 2002/May 2002
Chloroethane	NF	4.0E-01	0.8	NF	3.2E-01	NF	NF	NCEA	April 2002
Chloroform	NF	1.0E-02	1.0 (a)	NF	1.0E-02	liver	1,000	IRIS/IRIS	May 2002/May 2002
Chlorophenyl-phenylether, 4-	NF	2.0E-03 (6)	0.5	NF	1.0E-03	liver	1,000	IRIS/IRIS	May 2002/May 2002
Chromium	2.0E-02 (6)	3.0E-03 (6)	0.013 (a)	2.6E-04	3.9E-05	NOAEL	900 (6)	IRIS/IRIS	May 2002/May 2002
Chrysene	NF	NF	0.5	NF	NF	NF	NF	NF	N/A
Cobalt	NF	2.0E-02	0.25 (a)	NF	5.0E-03	NF	NF	NCEA	April 2002
Copper	NF	4.0E-02	0.56 (a)	NF	2.2E-02	GI	NF	HEAST/HEAST	1997/1997
Cyanide	NF	2.0E-02	1 (a)	NF	2.0E-02	body weight	500	IRIS/IRIS	May 2002/May 2002
Dichlorobenzene, 1,4-	NF	3.0E-02	1 (a)	NF	3.0E-02	NF	NF	NCEA	April 2002
Dichloroethane, 1,1-	1.0E+00	1.0E-01	0.8	8.0E-01	8.0E-02	NOAEL	1,000	HEAST/HEAST	1997/1997
Dichloroethane, 1,2-	NF	3.0E-02	1 (a)	NF	3.0E-02	CNS, liver	NF	NCEA	April 2002
Dichloroethene, 1,1-	NF	9.0E-03	1 (a)	NF	9.0E-03	CNS, liver	1,000	IRIS/IRIS	May 2002/May 2002
Dichloroethene, 1,2- (cis)	1.0E-01	1.0E-02	0.8	8.0E-02	8.0E-03	blood	1,000	HEAST/HEAST	1997/1997
Dichloroethene, 1,2- (trans)	NF	2.0E-02	0.8	NF	1.6E-02	liver	1,000	IRIS/IRIS	May 2002/May 2002
Dieldrin	NF	5.0E-05	1 (a)	NF	5.0E-05	liver	100	IRIS/IRIS	May 2002/May 2002
Di-n-butyl phthalate	1.0E+00	1.0E-01	1 (a)	1.0E+00	1.0E-01	increased mortality	1,000	IRIS/IRIS	May 2002/May 2002
Dinitrotoluene, 2,4-	NF	2.0E-03	1 (a)	NF	2.0E-03	neurological	100	IRIS/IRIS	May 2002/May 2002

TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
AQUA-TECH SITE

Chemical of Potential Concern	Subchronic Oral RfD Value (1) (mg/kg•day)	Chronic Oral RfD Value (mg/kg•day)	Oral to Dermal Adjustment Factor (2)	Subchronic Adjusted Dermal RfD (3) (mg/kg•day)	Chronic Adjusted Dermal RfD (3) (mg/kg•day)	Primary Target Organ	Combined Uncertainty/Modifying Factors for Chronic RfD	Sources of Chronic RfD/Target Organ	Dates of RfD/Target Organ (4)
Heptachlor epoxide	NF	1.3E-05	0.4 (a)	NF	5.2E-06	CNS, liver	1,000	IRIS/IRIS	May 2002/May 2002
Indeno (1,2,3-cd) pyrene	NF	NF	0.5	NF	NF	NF	NF	NF	N/A
Iron	NF	3.0E-01	0.085 (a)	NF	2.6E-02	GI	NF	NCEA/Nieminen & Lemasters	April 2002/1996
Lead	NF	NF	N/A	NF	NF	NF	NF	NF	N/A
Manganese	1.4E-01	2.0E-02	0.04 (a)	5.6E-03	8.0E-04	CNS	1	IRIS/IRIS	May 2002/May 2002
Mercury	NF	3.0E-04 (6)	0.10 (a)	NF	3.0E-05	development, CNS	1,000 (6)	surrogate	N/A
Methyl tert butyl ether	NF	3.0E-02 (7)	1 (a)	NF	3.0E-02	NF			
Naphthalene	NF	2.0E-02	1 (a)	NF	2.0E-02	body weight	3,000	IRIS/IRIS	May 2002/May 2002
Nickel (soluble salts)	NF	2.0E-02	0.05	NF	1.0E-03	decreased body weight	300	IRIS/IRIS	May 2002/May 2002
Nitrophenol, 2-	NF	8.0E-03 (6)	0.5	NF	4.0E-03	NF	NF	NCEA	April 2002
Tetrachloroethane, 1,1,2,2-	NF	6.0E-02	0.8	NF	4.8E-02	NF	NF	NCEA	April 2002
Tetrachloroethylene	1.0E-01	1.0E-02	1 (a)	1.0E-01	1.0E-02	CNS, liver	1,000	IRIS/IRIS	May 2002/May 2002
Thallium	NF	7.0E-05 (6)	0.2	NF	1.4E-05	CNS	NF	NCEA	April 2002
Toluene	NF	2.0E-01	1	NF	2.0E-01	liver, kidney	1,000	IRIS/IRIS	May 2002/May 2002
Toxaphene	NF	NF	0.5	NF	NF	NF	NF	NF	N/A
Trichloroethane, 1,1,1-	NF	2.8E-01	1 (a)	NF	2.8E-01	CNS	NF	NCEA	April 2002
Trichloroethane, 1,1,2-	4.0E-02	4.0E-03	0.81 (a)	3.2E-02	3.2E-03	blood, liver	1,000	IRIS/IRIS	May 2002/May 2002
Trichloroethylene	NF	3.0E-04	0.945 (a)	NF	2.8E-04	CNS, kidney	NF	NCEA	April 2002
Vanadium	NF	7.0E-03	0.026 (a)	NF	1.8E-04	GI, kidney	100	HEAST/HEAST	1997/1997
Vinyl chloride (adult lifetime)	NF	3.0E-03	0.875 (a)	NF	2.6E-03	CNS	NF	IRIS/IRIS	May 2002/May 2002
Vinyl chloride (entire lifetime)	NF	3.0E-03	0.875 (a)	NF	2.6E-03	CNS	NF	IRIS/IRIS	May 2002/May 2002

N/A = Not Applicable.

NF = Not Found.

(1) All subchronic RfDs were obtained from HEAST, 1997.

(2) Values marked (a) were obtained from current ATSDR profiles (ATSDR, 1990-1998).

The other values are based on Region IV guidance: 0.8 for volatiles, 0.5 for semivolatiles and 0.2 for inorganics.

(3) Oral RfD multiplied by the oral-to-dermal adjustment factor.

(4) For IRIS values, the date IRIS was searched.

For DOE values, the date of the web site search.

For NCEA values, the date of the Region 3 RBC Table.

(5) Oral RfD for cadmium in food - for exposure to groundwater and surface water, the oral RfD for cadmium in water (5E-04) was used.

(6) Surrogate values based on closely related compounds as follows:

Aroclor 1254 for Aroclor 1242 and Aroclor 1248

Pentabromodiphenyl ether for 4-Chlorophenyl-phenylether

Chromium VI for Chromium

Mercuric chloride for Mercury

Thallic oxide for Thallium

4-Nitrophenol for 2-Nitrophenol

CNS = Central Nervous System

GI = Gastrointestinal

NOAEL = No Observed Adverse Effects Level

IRIS = Integrated Risk Information System

DOE = Department of Energy (website)

HEAST = Health Effects Assessment Summary Tables

NCEA = National Center for Environmental Assessment

ATSDR = Agency for Toxic Substances and Disease Registry

TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
AQUA-TECH SITE

Chemical of Potential Concern	Subchronic Inhalation RfC Value (1) (mg/m ³)	Chronic Inhalation RfC Value (mg/m ³)	Subchronic Adjusted Inhalation RfD (2) (mg/kg•day)	Chronic Adjusted Inhalation RfD (2) (mg/kg•day)	Primary Target Organ	Combined Uncertainty/Modifying Factors	Sources of RfC,RfD/Target Organ	Dates of RfC,RfD/Target Organ (3)
Acetone	NF	NF	NF	NF	NF	NF	NF	N/A
Aldrin	NF	NF	NF	NF	NF	NF	NF	N/A
Aluminum	NF	NF	NF	1.0E-03	lung	NF	NCEA/DOE	Apr 2002/Nov 2000
Antimony	NF	NF	NF	NF	NF	NF	NF	N/A
Aroclor-1242	NF	NF	NF	NF	NF	NF	NF	N/A
Aroclor-1248	NF	NF	NF	NF	NF	NF	NF	N/A
Aroclor-1254	NF	NF	NF	NF	NF	NF	NF	N/A
Arsenic	NF	NF	NF	NF	NF	NF	NF	N/A
Barium	5.0E-03	5.0E-04	1.4E-03	1.4E-04	respiratory, blood pressure	1,000	HEAST/DOE	1997/Nov 2000
Benzene	NF	NF	NF	1.7E-03	blood, CNS	NF	NCEA/DOE	Apr 2002/Nov 2000
Benzo(a)anthracene	NF	NF	NF	NF	NF	NF	NF	N/A
Benzo(a)pyrene	NF	NF	NF	NF	NF	NF	NF	N/A
Benzo(b)fluoranthene	NF	NF	NF	NF	NF	NF	NF	N/A
Benzo(k)fluoranthene	NF	NF	NF	NF	NF	NF	NF	N/A
BHC, alpha-	NF	NF	NF	NF	NF	NF	NF	N/A
Bis(2-chloroethyl)ether	NF	NF	NF	NF	NF	NF	NF	N/A
Bis(2-ethylhexyl)phthalate	NF	NF	NF	NF	NF	NF	NF	N/A
Bromodichloromethane	NF	NF	NF	NF	NF	NF	NF	N/A
Cadmium	NF	NF	NF	NF	NF	NF	NF	N/A
Carbon tetrachloride	NF	NF	NF	5.71E-04	NF	NF	NCEA	Apr 2002
Chlorobenzene	NF	NF	NF	1.7E-02	NF	NF	NCEA	Apr 2002
Chloroethane	NF	1.0E+01	NF	2.9E+00	development	300	IRIS/IRIS	May 2002/May 2002
Chloroform	NF	NF	NF	8.6E-05	NF	NF	NCEA	Apr 2002
Chlorophenyl-phenylether, 4-	NF	NF	NF	NF	NF	NF	NF	N/A
Chromium	NF	1.0E-04 (4)	NF	2.9E-05	respiratory	300	IRIS/IRIS	May 2002/May 2002
Chrysene	NF	NF	NF	NF	NF	NF	NF	N/A
Cobalt	NF	NF	NF	5.0E-06	NF	NF	NCEA	N/A
Copper	NF	NF	NF	NF	NF	NF	NF	N/A
Cyanide	NF	NF	NF	NF	NF	NF	NF	N/A
Dichlorobenzene, 1,4-	2.5E+00	8.0E-01	7.1E-01	2.29E-01	liver	100	IRIS/IRIS	May 2002/May 2002
Dichloroethane, 1,1-	5.0E+00	5.0E-01	1.4E+00	1.4E-01	NF	NF	HEAST	1997
Dichloroethane, 1,2-	NF	NF	NF	1.4E-03	CNS, kidney, liver	NF	NCEA/DOE	Apr 2000/Nov 2000
Dichloroethene, 1,1-	NF	NF	NF	NF	NF	NF	NF	N/A
Dichloroethene, 1,2- (cis)	NF	NF	NF	NF	NF	NF	NF	N/A
Dichloroethene, 1,2- (trans)	NF	NF	NF	NF	NF	NF	NF	N/A
Dieldrin	NF	NF	NF	NF	NF	NF	NF	N/A
Di-n-butyl phthalate	NF	NF	NF	NF	NF	NF	NF	N/A

TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
AQUA-TECH SITE

Chemical of Potential Concern	Subchronic Inhalation RfC Value (1) (mg/m ³)	Chronic Inhalation RfC Value (mg/m ³)	Subchronic Adjusted Inhalation RfD (2) (mg/kg•day)	Chronic Adjusted Inhalation RfD (2) (mg/kg•day)	Primary Target Organ	Combined Uncertainty/Modifying Factors	Sources of RfC,RfD/Target Organ	Dates of RfC,RfD/Target Organ (3)
Dinitrotoluene, 2,4-	NF	NF	NF	NF	NF	NF	NF	N/A
Heptachlor epoxide	NF	NF	NF	NF	NF	NF	NF	N/A
Indeno (1,2,3-cd) pyrene	NF	NF	NF	NF	NF	NF	NF	N/A
Iron	NF	NF	NF	NF	NF	NF	NF	N/A
Lead	NF	NF	NF	NF	NF	NF	NF	N/A
Manganese	NF	5.0E-05	NF	1.4E-05	CNS	1,000	IRIS/IRIS	May 2002/May 2002
Mercury	NF	3.0E-04	NF	8.6E-05	CNS	30	IRIS/IRIS	May 2002/May 2002
Methyl tert butyl ether	NF	3.0E+00	NF	8.6E-01	kidney, liver	100	IRIS/IRIS	May 2002/May 2002
Naphthalene	NF	3.0E-03	NF	8.6E-04	nasal	3,000	IRIS/IRIS	May 2002/May 2002
Nickel (soluble salts)	NF	NF	NF	NF	NF	NF	NF	N/A
Nitrophenol, 2-	NF	NF	NF	NF	NF	NF	NF	N/A
Tetrachloroethane, 1,1,2,2-	NF	NF	NF	NF	NF	NF	NF	N/A
Tetrachloroethene	NF	NF	NF	1.4E-01	NF	NF	NCEA	Apr 2002
Thallium	NF	NF	NF	NF	NF	NF	NF	N/A
Toluene	NF	4.0E-01	NF	1.1E-01	neurological	300	IRIS/IRIS	May 2002/May 2002
Toxaphene	NF	NF	NF	NF	NF	NF	NF	N/A
Trichloroethane, 1,1,1-	NF	NF	NF	6.30E-01	NF	NF	NCEA	Apr 2002
Trichloroethane, 1,1,2-	NF	NF	NF	NF	NF	NF	NF	N/A
Trichloroethene	NF	NF	NF	1.0E-02	NF	NF	NCEA	Apr 2002
Vanadium	NF	NF	NF	NF	NF	NF	NF	N/A
Vinyl chloride (adult lifetime)	NF	1.0E-01	NF	2.9E-02	NF	NF	IRIS/IRIS	May 2002/May 2002
Vinyl chloride (entire lifetime)	NF	1.0E-01	NF	2.9E-02	NF	NF	IRIS/IRIS	May 2002/May 2002

N/A = Not Applicable

NF = Not Found.

(1) All subchronic RfCs were obtained from HEAST, 1997.

(2) Derived by multiplying the RfC by the inhalation rate of 20m³/day and dividing by the body weight of 70 kg.

(3) For IRIS values, the date IRIS was searched.

For DOE values, the date of the web site search.

For NCEA values, the date of the Region 9 PRG Table.

(4) Surrogate values based on closely related compounds as follows:

Chromium VI for Chromium

CNS = Central Nervous System

IRIS = Integrated Risk Information System

DOE = Department of Energy (website)

HEAST = Health Effects Assessment Summary Tables

NCEA = National Center for Environmental Assessment

Table 6 Series
Cancer Toxicity Data

TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
AQUA-TECH SITE

Chemical of Potential Concern	Oral Cancer Slope Factor (mg/kg•day) ⁻¹	Oral to Dermal Adjustment Factor	Adjusted Dermal Cancer Slope Factor (1) (mg/kg•day) ⁻¹	Weight of Evidence/Cancer Guideline Description	Source Cancer Slope Factor	Date (2)
Acetone	N/A	0.8	N/A	Not Likely	N/A	N/A
Aldrin	1.7E+01	1.0	1.7E+01	Known/Likely/B2	IRIS	May 2002
Aluminum	N/A	0.04	N/A	N/A	N/A	N/A
Antimony	N/A	0.01	N/A	N/A	N/A	N/A
Aroclor-1242	2.0E+00 (3)	0.85	2.4E+00	Known/Likely/B2	IRIS	May 2002
Aroclor-1248	2.0E+00 (3)	0.85	2.4E+00	Known/Likely/B2	IRIS	May 2002
Aroclor-1254	2.0E+00 (3)	0.85	2.4E+00	Known/Likely/B2	IRIS	May 2002
Arsenic	1.5E+00	0.95	1.6E+00	Known/Likely/A	IRIS	May 2002
Barium	N/A	0.05	N/A	N/A	N/A	N/A
Benzene	5.5E-02	0.9	6.1E-02	Known/Likely/A	IRIS	May 2002
Benzo(a)anthracene	7.3E-01	0.5	1.5E+00	Known/Likely/B2	TEF	N/A
Benzo(a)pyrene	7.3E+00	0.5	1.5E+01	Known/Likely/B2	NCEA	April 2002
Benzo(b)fluoranthene	7.3E-01	0.5	1.5E+00	Known/Likely/B2	NCEA	April 2002
Benzo(k)fluoranthene	7.3E-02	0.5	1.5E-01	Known/Likely/B2	TEF	N/A
BHC, alpha-	6.3E+00	0.974	6.5E+00	Known/Likely/B2	IRIS	May 2002
Bis(2-chloroethyl)ether	1.1E+00	0.98	1.1E+00	Known/Likely/B2	IRIS	May 2002
Bis(2-ethylhexyl)phthalate	1.4E-02	0.5	2.8E-02	Known/Likely/B2	IRIS	May 2002
Bromodichloromethane	6.2E-02	0.98	6.3E-02	Known/Likely/B2	IRIS	May 2002
Cadmium	N/A	0.044	N/A	N/A	N/A	N/A
Carbon tetrachloride	1.3E-01	0.85	1.5E-01	Known/Likely/B2	IRIS	May 2002
Chlorobenzene	N/A	0.31	N/A	Not Likely	N/A	N/A
Chloroethane	2.9E-03	0.8	3.6E-03	NF	NCEA	April 2002
Chloroform	N/A	1.0	N/A	NF	N/A	N/A
Chlorophenyl-phenylether, 4-	N/A	0.5	N/A	Not Likely	N/A	N/A
Chromium	N/A	0.013	N/A	N/A	N/A	N/A
Chrysene	7.3E-03	0.5	1.5E-02	Known/Likely/B2	TEF	N/A
Cobalt	N/A	0.25	N/A	N/A	N/A	N/A
Copper	N/A	0.56	N/A	Cannot be determined/D	N/A	N/A
Cyanide	N/A	1.0	N/A	Cannot be determined/D	N/A	N/A
Dichlorobenzene, 1,4-	2.4E-02	1.0	2.4E-02	Known/Likely/C	HEAST	1997
Dichloroethane, 1,1-	N/A	0.8	N/A	N/A	N/A	N/A
Dichloroethane, 1,2-	9.1E-02	1.0	9.1E-02	Known/Likely/B2	IRIS	May 2002
Dichloroethene, 1,1-	6.0E-01	1.0	6.0E-01	Known/Likely/C	IRIS	May 2002
Dichloroethene, 1,2- (cis)	N/A	0.8	N/A	N/A	N/A	N/A
Dichloroethene, 1,2- (trans)	N/A	0.8	N/A	N/A	N/A	N/A
Dieldrin	1.6E+01	1.0	1.6E+01	Known/Likely/B2	IRIS	May 2002

TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
AQUA-TECH SITE

Chemical of Potential Concern	Oral Cancer Slope Factor (mg/kg•day) ⁻¹	Oral to Dermal Adjustment Factor	Adjusted Dermal Cancer Slope Factor (1) (mg/kg•day) ⁻¹	Weight of Evidence/Cancer Guideline Description	Source Cancer Slope Factor	Date (2)
Di-n-butyl phthalate	N/A	1.0	N/A	Cannot be determined/D	N/A	N/A
Dinitrotoluene, 2,4-	6.8E-01 (3)	1.0	6.8E-01	Known/Likely/B2	IRIS	May 2002
Heptachlor epoxide	9.1E+00	0.4	2.3E+01	Known/Likely/B2	IRIS	May 2002
Indeno (1,2,3-cd) pyrene	7.3E-01	0.5	1.5E+00	Known/Likely/B2	TEF	N/A
Iron	N/A	0.085	N/A	Cannot be determined/D	N/A	N/A
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	0.04	N/A	Cannot be determined/D	N/A	N/A
Mercury	N/A	0.1	N/A	N/A	N/A	N/A
Methyl tert butyl ether	N/A	1.0	N/A	N/A	N/A	N/A
Naphthalene	N/A	1.0	N/A	Possible/C	N/A	N/A
Nickel (soluble salts)	N/A	0.05	N/A	N/A	N/A	N/A
Nitrophenol, 2-	N/A	0.5	N/A	N/A	N/A	N/A
Tetrachloroethane, 1,1,2,2-	2.0E-01	0.8	2.5E-01	Known/Likely/C	IRIS	May 2002
Tetrachloroethene	5.2E-02	1.0	5.2E-02	NF	NCEA	April 2002
Thallium	N/A	0.2	N/A	N/A	N/A	N/A
Toluene	N/A	1.0	N/A	N/A	N/A	N/A
Toxaphene	1.1E+00	0.50	2.2E+00	Known/Likely/B2	IRIS	May 2002
Trichloroethane, 1,1,1-	N/A	1.0	N/A	Cannot be determined/D	N/A	N/A
Trichloroethane, 1,1,2-	5.7E-02	0.81	7.0E-02	Known/Likely/C	IRIS	May 2002
Trichloroethylene	4.0E-01	0.945	4.2E-01	Highly likely/B1	NCEA	April 2002
Vanadium	N/A	0.026	N/A	N/A	N/A	N/A
Vinyl chloride (adult lifetime)	7.5E-01	0.875	8.6E-01	Known/A	IRIS	May 2002
Vinyl chloride (entire lifetime)	1.5E+00	0.875	1.7E+00	Known/A	IRIS	May 2002

N/A Not applicable.

IRIS = Integrated Risk Information System

HEAST= Health Effects Assessment Summary Tables

NCEA = National Center for Environmental Assessment

TEF = Benzo(a)pyrene Toxicity Equivalence Factor methodology

(1) Oral CSF multiplied by the dermal adjustment factor.

(2) For IRIS values, the date IRIS was searched.

For HEAST values, the date of HEAST.

For NCEA values, the date of the Region 9 PRG Table.

(3) The noted values are based on the following surrogates:

Mixed PCBs for Aroclor 1242, 1248 and 1254

Mixed 2,4- and 2,6- Dinitrotoluene for 2,4-Dinitrotoluene

IRIS Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen

Weight of Evidence:

Known/Likely

Cannot be Determined

Not Likely

TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
AQUA-TECH SITE

Chemical of Potential Concern	Unit Risk (mg/m ³) ⁻¹	Adjustment (1)	Inhalation Cancer Slope Factor	Weight of Evidence/Cancer Guideline Description	Source	Date (2)
Acetone	N/A	N/A	N/A	Not likely	N/A	N/A
Aldrin	4.9E+00	x BW ÷ IR	1.7E+01	Known/Likely/B2	IRIS	May 2002
Aluminum	N/A	N/A	N/A	Not likely	N/A	N/A
Antimony	N/A	N/A	N/A	Not likely	N/A	N/A
Aroclor-1242	NF	N/A	4.0E-01 (3)	Known/Likely/B2	IRIS	May 2002
Aroclor-1248	NF	N/A	4.0E-01 (3)	Known/Likely/B2	IRIS	May 2002
Aroclor-1254	NF	N/A	4.0E-01 (3)	Known/Likely/B2	IRIS	May 2002
Arsenic	4.3E+00	x BW ÷ IR	1.5E+01	Known/Likely/A	IRIS	May 2002
Barium	N/A	N/A	N/A	Not likely	N/A	N/A
Benzene	7.8E-03	x BW ÷ IR	2.7E-02	Known/Likely/A	IRIS	May 2002
Benzo(a)anthracene	N/A	N/A	3.1E-01	Known/Likely/B2	TEF	N/A
Benzo(a)pyrene	NF	N/A	3.1E+00	Known/Likely/B2	NCEA	April 2002
Benzo(b)fluoranthene	NF	N/A	3.1E-01	Known/Likely/B2	NCEA	April 2002
Benzo(k)fluoranthene	NF	N/A	3.1E-02	Known/Likely/B2	TEF	N/A
BHC, alpha-	1.8E+00	x BW ÷ IR	6.3E+00	Known/Likely/B2	IRIS	May 2002
Bis(2-chloroethyl)ether	3.3E-01	x BW ÷ IR	1.2E+00	Known/Likely/B2	IRIS	May 2002
Bis(2-ethylhexyl)phthalate	NF	N/A	1.4E-02	NF	NCEA	April 2002
Bromodichloromethane	N/A	N/A	N/A	Not likely	N/A	N/A
Cadmium	1.8E+00	x BW ÷ IR	6.3E+00	Known/Likely/B1	DOE	Nov 2000
Carbon tetrachloride	1.5E-02	x BW ÷ IR	5.3E-02	Known/Likely/B2	IRIS	May 2002
Chlorobenzene	N/A	N/A	N/A	Not likely	N/A	N/A
Chloroethane	N/A	N/A	N/A	Not likely	N/A	N/A
Chloroform	2.3E-02	x BW ÷ IR	8.1E-02	Known/Likely/B2	IRIS	May 2002
Chlorophenyl-phenylether, 4-	N/A	N/A	N/A	Not likely	N/A	N/A
Chromium	1.2E+01	x BW ÷ IR	4.2E+01	Known/Likely/A	IRIS	May 2002
Chrysene	NF	N/A	3.1E-03	Known/Likely/B2	TEF	N/A
Cobalt	N/A	N/A	N/A	Not likely	N/A	N/A
Copper	N/A	N/A	N/A	Not likely	N/A	N/A
Cyanide	N/A	N/A	N/A	Not likely	N/A	N/A
Dichlorobenzene, 1,4-	NF	N/A	2.2E-02	Known/Likely/C	NCEA	April 2002
Dichloroethane, 1,1-	N/A	N/A	N/A	Not likely	N/A	N/A
Dichloroethane, 1,2-	2.6E-02	x BW ÷ IR	9.1E-02	Known/Likely/B2	IRIS	May 2002
Dichloroethene, 1,1-	5.0E-02	x BW ÷ IR	1.75E-01	Known/Likely/C	IRIS	May 2002
Dichloroethene, 1,2- (cis)	N/A	N/A	N/A	Not likely	N/A	N/A
Dichloroethene, 1,2- (trans)	N/A	N/A	N/A	Not likely	N/A	N/A
Dieldrin	4.6E+00	x BW ÷ IR	1.6E+01	Known/Likely/B2	IRIS	May 2002

TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
AQUA-TECH SITE

Chemical of Potential Concern	Unit Risk (mg/m ³) ¹	Adjustment (1)	Inhalation Cancer Slope Factor	Weight of Evidence/Cancer Guideline Description	Source	Date (2)
Di-n-butyl phthalate	N/A	N/A	N/A	Not likely	N/A	N/A
Dinitrotoluene, 2,4-	N/A	N/A	N/A	Not likely	N/A	N/A
Heptachlor epoxide	2.6E+00	x BW ÷ IR	9.1E+00	Known/Likely/B2	IRIS	May 2002
Indeno (1,2,3-cd) pyrene	NF	N/A	3.1E-01	Known/Likely/B2	TEF	N/A
Iron	N/A	N/A	N/A	Not likely	N/A	N/A
Lead	N/A	N/A	N/A	Not likely	N/A	N/A
Manganese	N/A	N/A	N/A	Not likely	N/A	N/A
Mercury	N/A	N/A	N/A	Not likely	N/A	N/A
Methyl tert butyl ether	N/A	N/A	N/A	Not likely	N/A	N/A
Naphthalene	N/A	N/A	N/A	Not likely	N/A	N/A
Nickel (soluble salts)	N/A	N/A	N/A	Not likely	N/A	N/A
Nitrophenol, 2-	N/A	N/A	N/A	Not likely	N/A	N/A
Tetrachloroethane, 1,1,2,2-	5.8E-02	x BW ÷ IR	2.0E-01	Known/Likely/C	IRIS	May 2002
Tetrachloroethylene	NF	N/A	1.0E-02	NF	NCEA	April 2002
Thallium	N/A	N/A	N/A	Not likely	N/A	N/A
Toluene	N/A	N/A	N/A	Not likely	N/A	N/A
Toxaphene	3.2E-01	x BW ÷ IR	1.1E+00	Known/Likely/B2	IRIS	May 2002
Trichloroethane, 1,1,1-	N/A	N/A	N/A	Cannot be determined/D	N/A	N/A
Trichloroethane, 1,1,2-	1.6E-02	x BW ÷ IR	5.6E-02	Known/Likely/C	IRIS	May 2002
Trichloroethene	NF	N/A	4.0E-01	NF	NCEA	April 2002
Vanadium	N/A	N/A	N/A	Not likely	N/A	N/A
Vinyl chloride (adult lifetime)	4.4E-03	N/A	1.5E-02	NF	IRIS	May 2002
Vinyl chloride (entire lifetime)	8.8E-03	N/A	3.1E-02	NF	IRIS	May 2002

IRIS = Integrated Risk Information System

HEAST= Health Effects Assessment Summary Tables

NCEA = National Center for Environmental Assessment

TEF = Benzo(a)pyrene Toxicity Equivalence Factor methodology

(1) Inhalation Unit Risk multiplied by body weight (BW; 70 kg) and divided by inhalation rate (IR; 20m³/day).

(2) For IRIS values, the date IRIS was searched.

(3) The noted values are based on the following surrogates:

Mixed PCBs for Aroclor 1242, 1248 and 1254

N/A Not applicable.

NF Not found.

EPA Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen

Weight of Evidence:

Known/Likely

Cannot be Determined

Not Likely

Table 7 Series

Calculation of Non-Cancer Hazards and Calculation of Cancer Risks

TABLE 7.1a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	2.0E-09	3.0E-05	N/A	6.6E-05	2.8E-10	1.7E+01	4.8E-09
				Aluminum	47,785	1.5E-02	1.0E+00	N/A	1.5E-02	2.1E-03	N/A	NC
				Antimony	2.3	6.9E-07	4.0E-04	N/A	1.7E-03	9.8E-08	N/A	NC
				Aroclor-1242	0.12	3.6E-08	2.0E-05	N/A	1.8E-03	5.1E-09	2.0E+00	1.0E-08
				Aroclor-1248	0.30	9.1E-08	2.0E-05	N/A	4.6E-03	1.3E-08	2.0E+00	2.6E-08
				Aroclor-1254	0.28	8.5E-08	2.0E-05	N/A	4.2E-03	1.2E-08	2.0E+00	2.4E-08
				Arsenic	3.1	9.5E-07	3.0E-04	N/A	3.2E-03	1.4E-07	1.5E+00	2.0E-07
				Barium	1,668	5.1E-04	7.0E-02	N/A	7.3E-03	7.3E-05	N/A	NC
				Benzo(a)anthracene	0.37	1.1E-07	NF	N/A	NC	1.6E-08	7.3E-01	1.2E-08
				Benzo(a)pyrene	0.58	1.8E-07	NF	N/A	NC	2.5E-08	7.3E+00	1.8E-07
				Benzo(b)fluoranthene	0.59	1.8E-07	NF	N/A	NC	2.6E-08	7.3E-01	1.9E-08
				Benzo(k)fluoranthene	0.41	1.2E-07	NF	N/A	NC	1.8E-08	7.3E-02	1.3E-09
				Bis(2-ethylhexyl)phthalate	11	3.3E-06	2.0E-02	N/A	1.7E-04	4.8E-07	1.4E-02	6.7E-09
				Cadmium	9.1	2.8E-06	1.0E-03	N/A	2.8E-03	4.0E-07	N/A	NC
				Chromium	111	3.4E-05	3.0E-03	N/A	1.1E-02	4.8E-06	N/A	NC
				Chrysene	0.43	1.3E-07	NF	N/A	NC	1.9E-08	7.3E-03	1.4E-10
				Copper	116	3.5E-05	4.0E-02	N/A	8.8E-04	5.1E-06	N/A	NC
				Cyanide, total	3.5	1.1E-06	2.0E-02	N/A	5.3E-05	1.5E-07	N/A	NC
				Iron	45,866	1.4E-02	3.0E-01	N/A	4.7E-02	2.0E-03	N/A	NC
				Lead	98	3.0E-05	NF	N/A	NC	4.3E-06	N/A	NC
				Manganese	584	1.8E-04	2.0E-02	N/A	8.9E-03	2.5E-05	N/A	NC
				Mercury	7.3	2.2E-06	3.0E-04	N/A	7.4E-03	3.2E-07	N/A	NC
				Naphthalene	1.5	4.4E-07	2.0E-02	N/A	2.2E-05	6.3E-08	N/A	NC
				Nickel	53	1.6E-05	2.0E-02	N/A	8.1E-04	2.3E-06	N/A	NC
				Tetrachloroethene	0.080	2.4E-08	1.0E-02	N/A	2.4E-06	3.5E-09	5.2E-02	1.8E-10
				Thallium	0.91	2.8E-07	7.0E-05	N/A	3.9E-03	3.9E-08	N/A	NC
				Toxaphene	0.58	1.8E-07	NF	N/A	NC	2.5E-08	1.1E+00	2.8E-08
				Trichloroethene	0.098	3.0E-08	3.0E-04	N/A	1.0E-04	4.3E-09	4.0E-01	1.7E-09
				Vanadium	147	4.5E-05	7.0E-03	N/A	6.4E-03	6.4E-06	N/A	NC
				(Total)					1.3E-01			5.2E-07
			Dermal	Aldrin	0.0065	1.3E-10	3.0E-05	N/A	4.3E-06	1.8E-11	1.7E+01	3.1E-10
				Aluminum	47,785	9.6E-05	4.0E-02	N/A	2.4E-03	1.4E-05	N/A	NC
				Antimony	2.3	4.5E-09	4.0E-06	N/A	1.1E-03	6.5E-10	N/A	NC
				Aroclor-1242	0.12	2.3E-09	1.7E-05	N/A	1.4E-04	3.3E-10	2.4E+00	7.9E-10
				Aroclor-1248	0.30	6.0E-09	1.7E-05	N/A	3.5E-04	8.6E-10	2.4E+00	2.0E-09
				Aroclor-1254	0.28	5.6E-09	1.7E-05	N/A	3.3E-04	8.0E-10	2.4E+00	1.9E-09
				Arsenic	3.1	6.3E-09	2.9E-04	N/A	2.2E-05	8.9E-10	1.6E+00	1.4E-09
				Barium	1,668	3.3E-06	3.5E-03	N/A	9.6E-04	4.8E-07	N/A	NC
				Benzo(a)anthracene	0.37	7.4E-09	NF	N/A	NC	1.1E-09	1.5E+00	1.5E-09
				Benzo(a)pyrene	0.58	1.2E-08	NF	N/A	NC	1.6E-09	1.5E+01	2.4E-08
				Benzo(b)fluoranthene	0.59	1.2E-08	NF	N/A	NC	1.7E-09	1.5E+00	2.5E-09
				Benzo(k)fluoranthene	0.41	8.2E-09	NF	N/A	NC	1.2E-09	1.5E-01	1.7E-10
				Bis(2-ethylhexyl)phthalate	11	2.2E-07	1.0E-02	N/A	2.2E-05	3.1E-08	2.8E-02	8.8E-10
				Cadmium	9.1	1.8E-08	4.4E-05	N/A	4.1E-04	2.6E-09	N/A	NC
				Chromium	111	2.2E-07	3.9E-05	N/A	5.7E-03	3.2E-08	N/A	NC
				Chrysene	0.43	8.6E-09	NF	N/A	NC	1.2E-09	1.5E-02	1.8E-11

TABLE 7.1a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Copper	116	2.3E-07	2.2E-02	N/A	1.0E-05	3.3E-08	N/A	NC
				Cyanide, total	3.5	6.9E-09	2.0E-02	N/A	3.5E-07	9.9E-10	N/A	NC
				Iron	45,866	9.2E-05	2.6E-02	N/A	3.6E-03	1.3E-05	N/A	NC
				Lead	98	2.0E-07	NF	N/A	NC	2.8E-08	N/A	NC
				Manganese	584	1.2E-06	8.0E-04	N/A	1.5E-03	1.7E-07	N/A	NC
				Mercury	7.3	1.5E-08	3.0E-05	N/A	4.9E-04	2.1E-09	N/A	NC
				Naphthalene	1.5	2.9E-08	2.0E-02	N/A	1.5E-06	4.2E-09	N/A	NC
				Nickel	53	1.1E-07	1.0E-03	N/A	1.1E-04	1.5E-08	N/A	NC
				Tetrachloroethene	0.080	1.6E-09	1.0E-02	N/A	1.6E-07	2.3E-10	5.2E-02	1.2E-11
				Thallium	0.91	1.8E-09	1.4E-05	N/A	1.3E-04	2.6E-10	N/A	NC
				Toxaphene	0.58	1.2E-08	NF	N/A	NC	1.7E-09	2.2E+00	3.6E-09
				Trichloroethene	0.10	2.0E-09	2.8E-04	N/A	6.9E-06	2.8E-10	4.2E-01	1.2E-10
				Vanadium	147	2.9E-07	1.8E-04	N/A	1.6E-03	4.2E-08	N/A	NC
				(Total)					1.9E-02			3.9E-08
	Air	Any Exposure Unit 1 location	Inhalation	Aldrin	0.0065	3.3E-11	NF	NF	4.7E-12	1.7E+01	8.0E-11	
				Aluminum	47,785	6.8E-10	1.0E-03	NF	6.8E-07	9.7E-11	N/A	NC
				Antimony	2.3	3.2E-14	NF	NF	NC	4.6E-15	N/A	NC
				Aroclor-1242	0.12	1.1E-09	NF	NF	NC	1.5E-10	4.0E-01	6.0E-11
				Aroclor-1248	0.30	2.7E-09	NF	NF	NC	3.9E-10	4.0E-01	1.6E-10
				Aroclor-1254	0.28	2.5E-09	NF	NF	NC	3.6E-10	4.0E-01	1.4E-10
				Arsenic	3.1	4.4E-14	NF	NF	NC	6.3E-15	1.5E+01	9.5E-14
				Barium	1,668	2.4E-11	1.4E-04	5.0E-04	1.7E-07	3.4E-12	N/A	NC
				Benzo(a)anthracene	0.37	1.9E-10	NF	NF	NC	2.8E-11	3.1E-01	8.6E-12
				Benzo(a)pyrene	0.58	1.2E-10	NF	NF	NC	1.7E-11	3.1E+00	5.2E-11
				Benzo(b)fluoranthene	0.59	6.5E-11	NF	NF	NC	9.3E-12	3.1E-01	2.9E-12
				Benzo(k)fluoranthene	0.41	5.1E-11	NF	NF	NC	7.3E-12	3.1E-02	2.3E-13
				Bis(2-ethylhexyl)phthalate	11	2.9E-09	NF	NF	NC	4.2E-10	1.4E-02	5.9E-12
				Cadmium	9.1	1.3E-13	NF	NF	NC	1.8E-14	6.3E+00	1.2E-13
				Chromium	111	1.6E-12	2.9E-05	1.0E-04	5.5E-08	2.2E-13	4.2E+01	9.4E-12
				Chrysene	0.43	7.8E-10	NF	NF	NC	1.1E-10	3.1E-03	3.5E-13
				Copper	116	1.6E-12	NF	NF	NC	2.3E-13	N/A	NC
				Cyanide, total	3.5	4.9E-14	NF	NF	NC	7.0E-15	N/A	NC
				Iron	45,866	6.5E-10	NF	NF	NC	9.3E-11	N/A	NC
				Lead	98	1.4E-12	NF	NF	NC	2.0E-13	N/A	NC
				Manganese	584	8.3E-12	1.4E-05	5.0E-05	5.8E-07	1.2E-12	N/A	NC
				Mercury	7.3	1.1E-06	8.6E-05	3.0E-04	1.3E-02	1.6E-07	N/A	NC
				Naphthalene	1.5	1.3E-07	8.6E-04	3.0E-03	1.5E-04	1.8E-08	N/A	NC
				Nickel	53	7.5E-13	NF	NF	NC	1.1E-13	N/A	NC
				Tetrachloroethene	0.080	1.2E-07	1.4E-01	NF	8.8E-07	1.8E-08	1.0E-02	1.8E-10
				Thallium	0.91	1.3E-14	NF	NF	NC	1.8E-15	N/A	NC
				Toxaphene	0.58	4.0E-10	NF	NF	NC	5.7E-11	1.1E+00	6.4E-11
				Trichloroethene	0.098	1.9E-07	1.0E-02	NF	1.9E-05	2.6E-08	4.0E-01	1.1E-08
				Vanadium	147	2.1E-12	NF	NF	NC	3.0E-13	N/A	NC
				(Total)					1.3E-02			1.1E-08

TABLE 7.1a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Landfill Gas	Air	Any Exposure Unit 1 location	Inhalation	Benzene Vinyl chloride (Total)	EPC (mg/m ³) 0.000718 0.0007872	2.4E-05 2.6E-06	1.7E-03 2.9E-02	NF 0.1 9.1E-05 1.4E-02	1.4E-02 3.4E-06 3.7E-07	3.4E-06 2.7E-02 1.5E-02	9.2E-08 5.7E-09 9.8E-08	
Total Hazard Index Across All Exposure Routes/Pathways									1.7E-01	Total Cancer Risk		6.7E-07

TABLE 7.1b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	1.7E-02	3.0E-01	N/A	5.6E-02	2.4E-03	N/A	NC
				Manganese	254	1.5E-04	2.0E-02	N/A	7.7E-03	2.2E-05	N/A	NC
				Thallium	0.77	4.7E-07	7.0E-05	N/A	6.7E-03	6.7E-08	N/A	NC
			Dermal	Vanadium	76	4.6E-05	7.0E-03	N/A	6.6E-03	6.6E-06	N/A	NC
				(Total)					7.7E-02			NC
			Air	Iron	27,800	1.1E-04	2.6E-02	N/A	4.4E-03	1.6E-05	N/A	NC
				Manganese	254	1.0E-06	8.0E-04	N/A	1.3E-03	1.5E-07	N/A	NC
			Inhalation	Thallium	0.77	3.1E-09	1.4E-05	N/A	2.2E-04	4.4E-10	N/A	NC
				Vanadium	76	3.0E-07	1.8E-04	N/A	1.7E-03	4.4E-08	N/A	NC
				(Total)					7.5E-03			NC
Sediment	Sediment	Any Exposure Unit 2 location	Ingestion	Aluminum	17,251	1.1E-02	1.0E+00	N/A	1.1E-02	1.5E-03	N/A	NC
				Antimony	2.9	1.8E-06	4.0E-04	N/A	4.4E-03	2.5E-07	N/A	NC
				Aroclor-1248	0.035	2.1E-08	2.0E-05	N/A	1.1E-03	3.0E-09	2.0E+00	6.1E-09
				Aroclor-1254	0.033	2.0E-08	2.0E-05	N/A	1.0E-03	2.9E-09	2.0E+00	5.7E-09
				Arsenic	2.3	1.4E-06	3.0E-04	N/A	4.7E-03	2.0E-07	1.5E+00	3.0E-07
				Barium	688	4.2E-04	7.0E-02	N/A	6.0E-03	6.0E-05	N/A	NC
				Benzo(a)anthracene	0.15	9.1E-08	NF	N/A	NC	1.3E-08	7.3E-01	9.5E-09
				Benzo(a)pyrene	0.16	9.7E-08	NF	N/A	NC	1.4E-08	7.3E+00	1.0E-07
				Benzo(b)fluoranthene	0.16	9.7E-08	NF	N/A	NC	1.4E-08	7.3E-01	1.0E-08
				Benzo(k)fluoranthene	0.14	8.5E-08	NF	N/A	NC	1.2E-08	7.3E-02	8.9E-10
				Chromium	43	2.6E-05	3.0E-03	N/A	8.7E-03	3.7E-06	N/A	NC
				Chrysene	0.17	1.0E-07	NF	N/A	NC	1.5E-08	7.3E-03	1.1E-10
				Iron	23,760	1.4E-02	3.0E-01	N/A	4.8E-02	2.1E-03	N/A	NC
				Manganese	759	4.6E-04	2.0E-02	N/A	2.3E-02	6.6E-05	N/A	NC
				Mercury	0.41	2.5E-07	3.0E-04	N/A	8.3E-04	3.6E-08	N/A	NC
				Thallium	3.2	1.9E-06	7.0E-05	N/A	2.8E-02	2.8E-07	N/A	NC
				Vanadium	61	3.7E-05	7.0E-03	N/A	5.3E-03	5.3E-06	N/A	NC
				(Total)					1.4E-01			4.3E-07
			Dermal	Aluminum	17,251	6.9E-05	4.0E-02	N/A	1.7E-03	9.9E-06	N/A	NC
				Antimony	2.9	1.2E-08	4.0E-06	N/A	2.9E-03	1.7E-09	N/A	NC
				Aroclor-1248	0.035	1.4E-09	1.7E-05	N/A	8.3E-05	2.0E-10	2.4E+00	4.7E-10
				Aroclor-1254	0.033	1.3E-09	1.7E-05	N/A	7.8E-05	1.9E-10	2.4E+00	4.4E-10
				Arsenic	2.3	9.2E-09	2.9E-04	N/A	3.2E-05	1.3E-09	1.6E+00	2.1E-09

**TABLE 7.1b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE**

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Sediment	Sediment	Any Exposure Unit 2 location	Dermal	Iron	23,760	9.5E-05	2.6E-02	N/A	3.7E-03	1.4E-05	N/A	NC
				Manganese	759	3.0E-06	8.0E-04	N/A	3.8E-03	4.3E-07	N/A	NC
				Mercury	0.41	1.6E-09	3.0E-05	N/A	5.5E-05	2.3E-10	N/A	NC
				Thallium	3.2	1.3E-08	1.4E-05	N/A	9.2E-04	1.8E-09	N/A	NC
				Vanadium	61	2.4E-07	1.8E-04	N/A	1.3E-03	3.5E-08	N/A	NC
				(Total)					2.0E-02			1.9E-08
	Air	Any Exposure Unit 2 location	Inhalation	Aluminum	17,251	4.9E-10	1.0E-03	NF	4.9E-07	7.0E-11	N/A	NC
				Antimony	2.9	8.2E-14	NF	NF	NC	1.2E-14	N/A	NC
				Aroclor-1248	0.035	6.3E-10	NF	NF	NC	9.1E-11	4.0E-01	3.6E-11
				Aroclor-1254	0.033	6.0E-10	NF	NF	NC	8.5E-11	4.0E-01	3.4E-11
				Arsenic	2.3	6.5E-14	NF	NF	NC	9.3E-15	1.5E+01	1.4E-13
Surface Water	Surface Water	Any Exposure Unit 2 location	Ingestion	Barium	688	1.9E-11	1.4E-04	5.0E-04	1.4E-07	2.8E-12	N/A	NC
				Benzo(a)anthracene	0.15	1.6E-10	NF	NF	NC	2.2E-11	3.1E-01	7.0E-12
				Benzo(a)pyrene	0.16	6.5E-11	NF	NF	NC	9.3E-12	3.1E+00	2.9E-11
				Benzo(b)fluoranthene	0.16	3.5E-11	NF	NF	NC	5.1E-12	3.1E-01	1.6E-12
				Benzo(k)fluoranthene	0.14	3.5E-11	NF	NF	NC	5.0E-12	3.1E-02	1.5E-13
				Chromium	43	1.2E-12	2.9E-05	1.0E-04	4.3E-08	1.7E-13	4.2E+01	7.3E-12
				Chrysene	0.17	6.2E-10	NF	NF	NC	8.8E-11	3.1E-03	2.7E-13
				Iron	23760	6.7E-10	NF	NF	NC	9.6E-11	N/A	NC
				Manganese	759	2.1E-11	1.4E-05	5.0E-05	1.5E-06	3.1E-12	N/A	NC
				Mercury	0.41	1.2E-07	8.6E-05	3.0E-04	1.4E-03	1.8E-08	N/A	NC
				Thallium	3.2	9.0E-14	NF	NF	NC	1.3E-14	N/A	NC
				Vanadium	61	1.7E-12	NF	NF	NC	2.5E-13	N/A	NC
				(Total)					1.4E-03			1.2E-10
				EPC (mg/L)								
				Acetone	0.0067	8.2E-07	1.0E-01	N/A	8.2E-06	1.2E-07	N/A	NC
				Aluminum	1.1	1.3E-04	1.0E+00	N/A	1.3E-04	1.9E-05	N/A	NC
				Benzene	0.0020	2.4E-07	3.0E-03	N/A	8.1E-05	3.5E-08	5.5E-02	1.9E-09
				Cadmium	0.24	2.9E-05	5.0E-04	N/A	5.8E-02	4.2E-06	N/A	NC
				Chloroform	0.0010	1.2E-07	1.0E-02	N/A	1.2E-05	1.7E-08	N/A	NC
				Cobalt	0.044	5.3E-06	2.0E-02	N/A	2.7E-04	7.6E-07	N/A	NC
				Di-n-butylphthalate	0.0010	1.2E-07	1.0E-01	N/A	1.2E-06	1.7E-08	N/A	NC
				Dichloroethane, 1,1-	0.0084	1.0E-06	1.0E-01	N/A	1.0E-05	1.5E-07	N/A	NC
				Dichloroethene, 1,2- (total)	0.023	2.8E-06	2.0E-02	N/A	1.4E-04	4.0E-07	N/A	NC
				Dieldrin	0.000037	4.5E-09	5.0E-05	N/A	9.0E-05	6.4E-10	1.6E+01	1.0E-08
				Iron	3.4	4.1E-04	3.0E-01	N/A	1.4E-03	5.9E-05	N/A	NC
				Manganese	7.2	8.8E-04	2.0E-02	N/A	4.4E-02	1.3E-04	N/A	NC
				Mercury	0.00020	2.4E-08	3.0E-04	N/A	8.1E-05	3.5E-09	N/A	NC
				Nickel	0.10	1.2E-05	2.0E-02	N/A	6.1E-04	1.7E-06	N/A	NC
				Nitrophenol, 2-	0.0020	2.4E-07	8.0E-03	N/A	3.0E-05	3.5E-08	N/A	NC
				Tetrachloroethene	0.0081	9.9E-07	1.0E-02	N/A	9.9E-05	1.4E-07	5.2E-02	7.3E-09
				Trichloroethane, 1,1,1-	0.0050	6.1E-07	2.8E-01	N/A	2.2E-06	8.7E-08	N/A	NC
				Trichloroethene	0.010	1.2E-06	3.0E-04	N/A	4.1E-03	1.7E-07	4.0E-01	7.0E-08
				Vanadium	0.0058	7.1E-07	7.0E-03	N/A	1.0E-04	1.0E-07	N/A	NC
				Vinyl Chloride	0.0061	7.4E-07	3.0E-03	N/A	2.5E-04	1.1E-07	7.5E-01	8.0E-08
				(Total)					1.1E-01			1.7E-07

TABLE 7.1b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg·day)	Chronic Reference Dose (mg/kg·day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg·day)	Cancer Slope Factor (mg/kg·day) ⁻¹	Cancer Risk
Surface Water	Surface Water	Any Exposure Unit 2 location	Dermal	Acetone	0.0067	1.5E-07	8.0E-02	N/A	1.9E-06	2.2E-08	N/A	NC
				Aluminum	1.1	4.4E-05	4.0E-02	N/A	1.1E-03	6.3E-06	N/A	NC
				Benzene	0.0020	1.7E-06	2.7E-03	N/A	6.2E-04	2.4E-07	6.1E-02	1.5E-08
				Cadmium	0.24	9.6E-06	4.4E-05	N/A	2.2E-01	1.4E-06	N/A	NC
				Chloroform	0.0010	3.6E-07	1.0E-02	N/A	3.6E-05	5.1E-08	N/A	NC
				Cobalt	0.044	1.8E-06	5.0E-03	N/A	3.5E-04	2.5E-07	N/A	NC
				Di-n-butylphthalate	0.0010	1.3E-06	1.0E-01	N/A	1.3E-05	1.9E-07	N/A	NC
				Dichloroethane, 1,1-	0.0084	3.0E-06	8.0E-02	N/A	3.7E-05	4.3E-07	N/A	NC
				Dichloroethene, 1,2- (total)	0.023	9.2E-06	1.6E-02	N/A	5.8E-04	1.3E-06	N/A	NC
				Dieldrin	0.000037	2.4E-08	5.0E-05	N/A	4.7E-04	3.4E-09	1.6E+01	5.4E-08
				Iron	3.4	1.4E-04	2.6E-02	N/A	5.3E-03	1.9E-05	N/A	NC
				Manganese	7.2	2.9E-04	8.0E-04	N/A	3.6E-01	4.1E-05	N/A	NC
				Mercury	0.00020	8.0E-09	3.0E-05	N/A	2.7E-04	1.1E-09	N/A	NC
				Nickel	0.10	4.0E-06	1.0E-03	N/A	4.0E-03	5.7E-07	N/A	NC
				Nitrophenol, 2-	0.0020	4.0E-07	4.0E-03	N/A	1.0E-04	5.7E-08	N/A	NC
				Tetrachloroethene	0.0081	1.6E-05	1.0E-02	N/A	1.6E-03	2.2E-06	5.2E-02	1.2E-07
				Trichloroethane, 1,1,1-	0.0050	3.4E-06	2.8E-01	N/A	1.2E-05	4.9E-07	N/A	NC
				Trichloroethene	0.010	6.4E-06	2.8E-04	N/A	2.3E-02	9.2E-07	4.2E-01	3.9E-07
				Vanadium	0.0058	2.3E-07	1.8E-04	N/A	1.3E-03	3.3E-08	N/A	NC
				Vinyl Chloride	0.0061	1.8E-06	2.6E-03	N/A	6.8E-04	2.6E-07	8.6E-01	2.2E-07
				(Total)					6.2E-01			7.9E-07
			Inhalation	Acetone	0.0067	4.7E-07	NF	NF	NC	6.7E-08	N/A	NC
				Aluminum	1.1	N/A	1.0E-03	NF	NC	N/A	N/A	NC
				Benzene	0.0020	3.8E-07	1.7E-03	NF	2.2E-04	5.4E-08	2.7E-02	1.5E-09
				Cadmium	0.24	N/A	NF	NF	NC	N/A	N/A	NC
				Chloroform	0.0010	1.9E-07	8.6E-05	NF	2.2E-03	2.7E-08	8.1E-02	2.2E-09
				Cobalt	0.044	N/A	5.0E-06	NF	NC	N/A	N/A	NC
				Di-n-butylphthalate	0.0010	1.3E-12	NF	NF	NC	1.8E-13	N/A	NC
				Dichloroethane, 1,1-	0.0084	1.6E-06	1.4E-01	5.0E-01	1.1E-05	2.3E-07	N/A	NC
				Dichloroethene, 1,2- (total)	0.023	4.7E-06	NF	NF	NC	6.7E-07	N/A	NC
				Dieldrin	0.000037	3.1E-10	NF	NF	NC	4.4E-11	1.6E+01	7.1E-10
				Iron	3.4	N/A	NF	NF	NC	N/A	N/A	NC
				Manganese	7.2	N/A	1.4E-05	5.0E-05	NC	N/A	N/A	NC
				Mercury	0.00020	3.0E-08	8.6E-05	3.0E-04	3.5E-04	4.3E-09	N/A	NC
				Nickel	0.10	N/A	NF	NF	NC	N/A	N/A	NC
				Nitrophenol, 2-	0.0020	2.5E-08	NF	NF	NC	3.6E-09	N/A	NC
				Tetrachloroethene	0.0081	1.4E-06	1.4E-01	NF	1.0E-05	2.0E-07	1.0E-02	2.0E-09
				Trichloroethane, 1,1,1-	0.0050	9.0E-07	6.3E-01	NF	1.4E-06	1.3E-07	N/A	NC
				Trichloroethene	0.010	1.8E-06	1.0E-02	NF	1.8E-04	2.6E-07	4.0E-01	1.0E-07
				Vanadium	0.0058	N/A	NF	NF	NC	N/A	N/A	NC
				Vinyl Chloride	0.0061	7.6E-07	2.9E-02	1.0E-01	2.6E-05	1.1E-07	1.5E-02	1.7E-09
				(Total)		EPC (mg/m³)			3.0E-03			1.1E-07
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene	0.000718	4.7E-05	1.7E-03	NF	2.8E-02	6.8E-06	2.7E-02	1.8E-07
				Vinyl chloride	0.0007872	5.2E-06	2.9E-02	0.1	1.8E-04	7.4E-07	1.5E-02	1.1E-08
				(Total)					2.8E-02			2.0E-07
Total Hazard Index Across All Exposure Routes/Pathways										1.0E+00		Total Cancer Risk
Page 3 of 3												1.7E-06

TABLE 7.2a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Commercial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	3.2E-09	3.0E-05	N/A	1.1E-04	1.1E-09	1.7E+01	1.9E-08
				Aluminum	47,785	2.3E-02	1.0E-00	N/A	2.3E-02	8.3E-03	N/A	NC
				Antimony	2.3	1.1E-06	4.0E-04	N/A	2.8E-03	4.0E-07	N/A	NC
				Aroclor-1242	0.12	5.7E-08	2.0E-05	N/A	2.9E-03	2.0E-08	2.0E+00	4.1E-08
				Aroclor-1248	0.30	1.5E-07	2.0E-05	N/A	7.3E-03	5.2E-08	2.0E+00	1.0E-07
				Aroclor-1254	0.28	1.4E-07	2.0E-05	N/A	6.8E-03	4.9E-08	2.0E+00	9.7E-08
				Arsenic	3.1	1.5E-06	3.0E-04	N/A	5.1E-03	5.5E-07	1.5E+00	8.2E-07
				Barium	1,668	8.2E-04	7.0E-02	N/A	1.2E-02	2.9E-04	N/A	NC
				Benzo(a)anthracene	0.37	1.8E-07	NF	N/A	NC	6.5E-08	7.3E-01	4.7E-08
				Benzo(a)pyrene	0.58	2.8E-07	NF	N/A	NC	1.0E-07	7.3E+00	7.3E-07
				Benzo(b)fluoranthene	0.59	2.9E-07	NF	N/A	NC	1.0E-07	7.3E-01	7.5E-08
				Benzo(k)fluoranthene	0.41	2.0E-07	NF	N/A	NC	7.2E-08	7.3E-02	5.2E-09
				Bis(2-ethylhexyl)phthalate	11	5.4E-06	2.0E-02	N/A	2.7E-04	1.9E-06	1.4E-02	2.7E-08
				Cadmium	9.1	4.4E-06	1.0E-03	N/A	4.4E-03	1.6E-06	N/A	NC
				Chromium	111	5.4E-05	3.0E-03	N/A	1.8E-02	1.9E-05	N/A	NC
				Chrysene	0.43	2.1E-07	NF	N/A	NC	7.5E-08	7.3E-03	5.5E-10
				Copper	116	5.7E-05	4.0E-02	N/A	1.4E-03	2.0E-05	N/A	NC
				Cyanide, total	3.5	1.7E-06	2.0E-02	N/A	8.5E-05	6.0E-07	N/A	NC
				Iron	45,866	2.2E-02	3.0E-01	N/A	7.5E-02	8.0E-03	N/A	NC
				Lead	98	4.8E-05	NF	N/A	NC	1.7E-05	N/A	NC
				Manganese	584	2.9E-04	2.0E-02	N/A	1.4E-02	1.0E-04	N/A	NC
				Mercury	7.3	3.6E-06	3.0E-04	N/A	1.2E-02	1.3E-06	N/A	NC
				Naphthalene	1.5	7.1E-07	2.0E-02	N/A	3.6E-05	2.5E-07	N/A	NC
				Nickel	53	2.6E-05	2.0E-02	N/A	1.3E-03	9.3E-06	N/A	NC
				Tetrachloroethene	0.080	3.9E-08	1.0E-02	N/A	3.9E-06	1.4E-08	5.2E-02	7.3E-10
				Thallium	0.91	4.4E-07	7.0E-05	N/A	6.3E-03	1.6E-07	N/A	NC
				Toxaphene	0.58	2.8E-07	NF	N/A	NC	1.0E-07	1.1E+00	1.1E-07
				Trichloroethene	0.098	4.8E-08	3.0E-04	N/A	1.6E-04	1.7E-08	4.0E-01	6.9E-09
				Vanadium	147	7.2E-05	7.0E-03	N/A	1.0E-02	2.6E-05	N/A	NC
				(Total)					2.0E-01			2.1E-06
			Dermal	Aldrin	0.0065	4.7E-10	3.0E-05	N/A	1.6E-05	1.7E-10	1.7E+01	2.9E-09
				Aluminum	47,785	3.5E-04	4.0E-02	N/A	8.8E-03	1.3E-04	N/A	NC
				Antimony	2.3	1.7E-08	4.0E-06	N/A	4.2E-03	5.9E-09	N/A	NC
				Aroclor-1242	0.12	8.6E-09	1.7E-05	N/A	5.0E-04	3.1E-09	2.4E+00	7.2E-09
				Aroclor-1248	0.30	2.2E-08	1.7E-05	N/A	1.3E-03	7.9E-09	2.4E+00	1.9E-08
				Aroclor-1254	0.28	2.0E-08	1.7E-05	N/A	1.2E-03	7.3E-09	2.4E+00	1.7E-08
				Arsenic	3.1	2.3E-08	2.9E-04	N/A	8.0E-05	8.2E-09	1.6E+00	1.3E-08
				Barium	1,668	1.2E-05	3.5E-03	N/A	3.5E-03	4.4E-06	N/A	NC
				Benzo(a)anthracene	0.37	2.7E-08	NF	N/A	NC	9.7E-09	1.5E+00	1.4E-08
				Benzo(a)pyrene	0.58	4.2E-08	NF	N/A	NC	1.5E-08	1.5E+01	2.2E-07
				Benzo(b)fluoranthene	0.59	4.3E-08	NF	N/A	NC	1.5E-08	1.5E+00	2.2E-08
				Benzo(k)fluoranthene	0.41	3.0E-08	NF	N/A	NC	1.1E-08	1.5E-01	1.6E-09
				Bis(2-ethylhexyl)phthalate	11	8.1E-07	1.0E-02	N/A	8.1E-05	2.9E-07	2.8E-02	8.1E-09
				Cadmium	9.1	6.7E-08	4.4E-05	N/A	1.5E-03	2.4E-08	N/A	NC
				Chromium	111	8.1E-07	3.9E-05	N/A	2.1E-02	2.9E-07	N/A	NC
				Chrysene	0.43	3.2E-08	NF	N/A	NC	1.1E-08	1.5E-02	1.6E-10
				Copper	116	8.5E-07	2.2E-02	N/A	3.8E-05	3.0E-07	N/A	NC

TABLE 7.2a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Commercial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Cyanide, total	3.5	2.5E-08	2.0E-02	N/A	1.3E-06	9.1E-09	N/A	NC
				Iron	45,866	3.4E-04	2.6E-02	N/A	1.3E-02	1.2E-04	N/A	NC
				Lead	98	7.2E-07	NF	N/A	NC	2.6E-07	N/A	NC
				Manganese	584	4.3E-06	8.0E-04	N/A	5.4E-03	1.5E-06	N/A	NC
				Mercury	7.3	5.3E-08	3.0E-05	N/A	1.8E-03	1.9E-08	N/A	NC
				Naphthalene	1.5	1.1E-07	2.0E-02	N/A	5.3E-06	3.8E-08	N/A	NC
				Nickel	53	3.9E-07	1.0E-03	N/A	3.9E-04	1.4E-07	N/A	NC
				Tetrachloroethene	0.080	5.9E-09	1.0E-02	N/A	5.9E-07	2.1E-09	5.2E-02	1.1E-10
				Thallium	0.91	6.7E-09	1.4E-05	N/A	4.8E-04	2.4E-09	N/A	NC
				Toxaphene	0.58	4.2E-08	NF	N/A	NC	1.5E-08	2.2E+00	3.3E-08
				Trichloroethene	0.098	7.2E-09	2.8E-04	N/A	2.5E-05	2.6E-09	4.2E-01	1.1E-09
				Vanadium	147	1.1E-06	1.8E-04	N/A	5.9E-03	3.9E-07	N/A	NC
				(Total)					6.9E-02			3.6E-07
	Air	Any Exposure Unit 1 location	Inhalation	Aldrin	0.0065	3.1E-10	NF	NF	NC	1.1E-10	1.7E+01	1.9E-09
				Aluminum	47,785	6.4E-09	1.0E-03	NF	6.4E-06	2.3E-09	N/A	NC
				Antimony	2.3	3.0E-13	NF	NF	NC	1.1E-13	N/A	NC
				Aroclor-1242	0.12	1.0E-08	NF	NF	NC	3.6E-09	4.0E-01	1.4E-09
				Aroclor-1248	0.30	2.6E-08	NF	NF	NC	9.2E-09	4.0E-01	3.7E-09
				Aroclor-1254	0.28	2.4E-08	NF	NF	NC	8.6E-09	4.0E-01	3.4E-09
				Arsenic	3.1	4.2E-13	NF	NF	NC	1.5E-13	1.5E+01	2.3E-12
				Barium	1,668	2.2E-10	1.4E-04	5.0E-04	1.6E-06	8.0E-11	N/A	NC
				Benzo(a)anthracene	0.37	1.8E-09	NF	NF	NC	6.6E-10	3.1E-01	2.0E-10
				Benzo(a)pyrene	0.58	1.1E-09	NF	NF	NC	4.0E-10	3.1E+00	1.2E-09
				Benzo(b)fluoranthene	0.59	6.2E-10	NF	NF	NC	2.2E-10	3.1E-01	6.8E-11
				Benzo(k)fluoranthene	0.41	4.9E-10	NF	NF	NC	1.7E-10	3.1E-02	5.4E-12
				Bis(2-ethylhexyl)phthalate	11	2.8E-08	NF	NF	NC	9.9E-09	1.4E-02	1.4E-10
				Cadmium	9.1	1.2E-12	NF	NF	NC	4.4E-13	6.3E+00	2.7E-12
				Chromium	111	1.5E-11	2.9E-05	1.0E-04	5.2E-07	5.3E-12	4.2E+01	2.2E-10
				Chrysene	0.43	7.4E-09	NF	NF	NC	2.6E-09	3.1E-03	8.2E-12
				Copper	116	1.6E-11	NF	NF	NC	5.6E-12	N/A	NC
				Cyanide, total	3,4618	4.6E-13	NF	NF	NC	1.7E-13	N/A	NC
				Iron	45,866	6.2E-09	NF	NF	NC	2.2E-09	N/A	NC
				Lead	98	1.3E-11	NF	NF	NC	4.7E-12	N/A	NC
				Manganese	584	7.8E-11	1.4E-05	5.0E-05	5.5E-06	2.8E-11	N/A	NC
				Mercury	7.3	1.0E-05	8.6E-05	3.0E-04	1.2E-01	3.7E-06	N/A	NC
				Naphthalene	1.5	1.2E-06	8.6E-04	3.0E-03	1.4E-03	4.4E-07	N/A	NC
				Nickel	53	7.1E-12	NF	NF	NC	2.6E-12	N/A	NC
				Tetrachloroethene	0.0804	1.2E-06	1.4E-01	NF	8.4E-06	4.2E-07	1.0E-02	4.2E-09
				Thallium	0.91	1.2E-13	NF	NF	NC	4.3E-14	N/A	NC
				Toxaphene	0.58	3.8E-09	NF	NF	NC	1.4E-09	1.1E+00	1.5E-09
				Trichloroethene	0.098	1.8E-06	1.0E-02	NF	1.8E-04	6.3E-07	4.0E-01	2.5E-07
				Vanadium	147	2.0E-11	NF	NF	NC	7.1E-12	N/A	NC
				(Total)					1.2E-01			2.7E-07

TABLE 7.2a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Commercial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk	
Landfill Gas	Air	Any Exposure Unit 1 location	Inhalation	Benzene Vinyl chloride (Total)	EPC (mg/m ³) 0.000718 0.0007872	2.2E-04 2.5E-05	1.7E-03 2.9E-02	NF 0.1 1.3E-01	1.3E-01 8.6E-04 8.8E-06	8.0E-05 2.7E-02 1.5E-02	2.2E-06 1.4E-07 2.3E-06	Total Hazard Index Across All Exposure Routes/Pathways 5.3E-01	Total Cancer Risk 5.0E-06

TABLE 7.2b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Commercial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	1.4E-02	3.0E-01	N/A	4.5E-02	4.9E-03	N/A	NC
				Manganese	254	1.2E-04	2.0E-02	N/A	6.2E-03	4.4E-05	N/A	NC
				Thallium	0.77	3.8E-07	7.0E-05	N/A	5.4E-03	1.3E-07	N/A	NC
				Vanadium	76	3.7E-05	7.0E-03	N/A	5.3E-03	1.3E-05	N/A	NC
			Dermal	(Total)					6.2E-02			NC
				Iron	27,800	2.0E-04	2.6E-02	N/A	8.0E-03	7.3E-05	N/A	NC
				Manganese	254	1.9E-06	8.0E-04	N/A	2.3E-03	6.7E-07	N/A	NC
				Thallium	0.77	5.7E-09	1.4E-05	N/A	4.0E-04	2.0E-09	N/A	NC
				Vanadium	76	5.6E-07	1.8E-04	N/A	3.1E-03	2.0E-07	N/A	NC
				(Total)					1.4E-02			NC
			Air	Iron	27,800	1.5E-08	NF	NF	NC	5.3E-09	N/A	NC
				Manganese	254	1.4E-10	1.4E-05	5.0E-05	9.5E-06	4.9E-11	N/A	NC
				Thallium	0.77	4.1E-13	NF	NF	NC	1.5E-13	N/A	NC
				Vanadium	76	4.1E-11	NF	NF	NC	1.5E-11	N/A	NC
				(Total)					9.5E-06			NC
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene	EPC (mg/m ³)	0.000718	2.2E-04	NF	1.3E-01	8.0E-05	2.7E-02	2.2E-06
				Vinyl chloride		0.0007872	2.5E-05	0.1	8.6E-04	8.8E-06	1.5E-02	1.4E-07
				(Total)					1.3E-01			2.3E-06
										2.1E-01		Total Cancer Risk
												2.3E-06

Total Hazard Index Across All Exposure Routes/Pathways

TABLE 7.3a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	8.3E-08	3.0E-05	N/A	2.8E-03	N/A	1.7E+01	NC
				Aluminum	47,785	6.1E-01	1.0E+00	N/A	6.1E-01	N/A	N/A	NC
				Antimony	2.3	2.9E-05	4.0E-04	N/A	7.2E-02	N/A	N/A	NC
				Aroclor-1242	0.12	1.5E-06	2.0E-05	N/A	7.5E-02	N/A	2.0E+00	NC
				Aroclor-1248	0.3	3.8E-06	2.0E-05	N/A	1.9E-01	N/A	2.0E+00	NC
				Aroclor-1254	0.28	3.6E-06	2.0E-05	N/A	1.8E-01	N/A	2.0E+00	NC
				Arsenic	3.1	4.0E-05	3.0E-04	N/A	1.3E-01	N/A	1.5E+00	NC
				Barium	1,668	2.1E-02	7.0E-02	N/A	3.0E-01	N/A	N/A	NC
				Benzo(a)anthracene	0.37	4.7E-06	NF	N/A	NC	N/A	7.3E-01	NC
				Benzo(a)pyrene	0.58	7.4E-06	NF	N/A	NC	N/A	7.3E+00	NC
				Benzo(b)fluoranthene	0.59	7.5E-06	NF	N/A	NC	N/A	7.3E-01	NC
				Benzo(k)fluoranthene	0.41	5.2E-06	NF	N/A	NC	N/A	7.3E-02	NC
				Bis(2-ethylhexyl)phthalate	11	1.4E-04	2.0E-02	N/A	7.0E-03	N/A	1.4E-02	NC
				Cadmium	9.1	1.2E-04	1.0E-03	N/A	1.2E-01	N/A	N/A	NC
				Chromium	111	1.4E-03	3.0E-03	N/A	4.7E-01	N/A	N/A	NC
				Chrysene	0.43	5.5E-06	NF	N/A	NC	N/A	7.3E-03	NC
				Copper	116	1.5E-03	4.0E-02	N/A	3.7E-02	N/A	N/A	NC
				Cyanide, total	3.5	4.4E-05	2.0E-02	N/A	2.2E-03	N/A	N/A	NC
				Iron	45,866	5.9E-01	3.0E-01	N/A	2.0E+00	N/A	N/A	NC
				Lead	98	1.3E-03	NF	N/A	NC	N/A	N/A	NC
				Manganese	584	7.5E-03	2.0E-02	N/A	3.7E-01	N/A	N/A	NC
				Mercury	7.3	9.3E-05	3.0E-04	N/A	3.1E-01	N/A	N/A	NC
				Naphthalene	1.5	1.9E-05	2.0E-02	N/A	9.3E-04	N/A	N/A	NC
				Nickel	53	6.8E-04	2.0E-02	N/A	3.4E-02	N/A	N/A	NC
				Tetrachloroethene	0.080	1.0E-06	1.0E-02	N/A	1.0E-04	N/A	5.2E-02	NC
				Thallium	0.91	1.2E-05	7.0E-05	N/A	1.7E-01	N/A	N/A	NC
				Toxaphene	0.58	7.4E-06	NF	N/A	NC	N/A	1.1E+00	NC
				Trichloroethene	0.098	1.3E-06	3.0E-04	N/A	4.2E-03	N/A	4.0E-01	NC
				Vanadium	147	1.9E-03	7.0E-03	N/A	2.7E-01	N/A	N/A	NC
				(Total)					5.3E+00			NC
			Dermal	Aldrin	0.0065	1.4E-09	3.0E-05	N/A	4.7E-05	N/A	1.7E+01	NC
				Aluminum	47,785	1.1E-03	4.0E-02	N/A	2.6E-02	N/A	N/A	NC
				Antimony	2.3	5.0E-08	4.0E-06	N/A	1.2E-02	N/A	N/A	NC
				Aroclor-1242	0.12	2.6E-08	1.7E-05	N/A	1.5E-03	N/A	2.4E+00	NC
				Aroclor-1248	0.30	6.6E-08	1.7E-05	N/A	3.9E-03	N/A	2.4E+00	NC
				Aroclor-1254	0.28	6.1E-08	1.7E-05	N/A	3.6E-03	N/A	2.4E+00	NC
				Arsenic	3.1	6.9E-08	2.9E-04	N/A	2.4E-04	N/A	1.6E+00	NC
				Barium	1,668	3.7E-05	3.5E-03	N/A	1.0E-02	N/A	N/A	NC
				Benzo(a)anthracene	0.37	8.1E-08	NF	N/A	NC	N/A	1.5E+00	NC
				Benzo(a)pyrene	1	1.3E-07	NF	N/A	NC	N/A	1.5E+01	NC
				Benzo(b)fluoranthene	0.59	1.3E-07	NF	N/A	NC	N/A	1.5E+00	NC
				Benzo(k)fluoranthene	0.41	9.0E-08	NF	N/A	NC	N/A	1.5E-01	NC
				Bis(2-ethylhexyl)phthalate	11	2.4E-06	1.0E-02	N/A	2.4E-04	N/A	2.8E-02	NC
				Cadmium	9.1	2.0E-07	4.4E-05	N/A	4.5E-03	N/A	N/A	NC
				Chromium	111	2.4E-06	3.9E-05	N/A	6.2E-02	N/A	N/A	NC
				Chrysene	0.43	9.5E-08	NF	N/A	NC	N/A	1.5E-02	NC

TABLE 7.3a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Copper	116	2.6E-06	2.2E-02	N/A	1.1E-04	N/A	N/A	NC
				Cyanide, total	3.5	7.6E-08	2.0E-02	N/A	3.8E-06	N/A	N/A	NC
				Iron	45,866	1.0E-03	2.6E-02	N/A	4.0E-02	N/A	N/A	NC
				Lead	98	2.2E-06	NF	N/A	NC	N/A	N/A	NC
				Manganese	584	1.3E-05	8.0E-04	N/A	1.6E-02	N/A	N/A	NC
				Mercury	7.3	1.6E-07	3.0E-05	N/A	5.3E-03	N/A	N/A	NC
				Naphthalene	1.5	3.2E-07	2.0E-02	N/A	1.6E-05	N/A	N/A	NC
				Nickel	53	1.2E-06	1.0E-03	N/A	1.2E-03	N/A	N/A	NC
				Tetrachloroethene	0.080	1.8E-08	1.0E-02	N/A	1.8E-06	N/A	5.2E-02	NC
				Thallium	0.91	2.0E-08	1.4E-05	N/A	1.4E-03	N/A	N/A	NC
				Toxaphene	0.58	1.3E-07	NF	N/A	NC	N/A	2.2E+00	NC
				Trichloroethene	0.10	2.2E-08	2.8E-04	N/A	7.6E-05	N/A	4.2E-01	NC
				Vanadium	147	3.2E-06	1.8E-04	N/A	1.8E-02	N/A	N/A	NC
				(Total)					2.1E-01			NC
	Air	Any Exposure Unit 1 location	Inhalation	Aldrin	0.0065	5.1E-09	NF	NF	NC	N/A	1.7E+01	NC
				Aluminum	47,785	1.1E-07	1.0E-03	NF	1.1E-04	N/A	N/A	NC
				Antimony	2.3	5.0E-12	NF	NF	NC	N/A	N/A	NC
				Aroclor-1242	0.12	1.7E-07	NF	NF	NC	N/A	4.0E-01	NC
				Aroclor-1248	0.30	4.3E-07	NF	NF	NC	N/A	4.0E-01	NC
				Aroclor-1254	0.28	4.0E-07	NF	NF	NC	N/A	4.0E-01	NC
				Arsenic	3.1	6.9E-12	NF	NF	NC	N/A	1.5E+01	NC
				Barium	1,668	3.7E-09	1.4E-04	5.0E-04	2.6E-05	N/A	N/A	NC
				Benzo(a)anthracene	0.37	3.0E-08	NF	NF	NC	N/A	3.1E-01	NC
				Benzo(a)pyrene	0.58	1.8E-08	NF	NF	NC	N/A	3.1E+00	NC
				Benzo(b)fluoranthene	0.59	1.0E-08	NF	NF	NC	N/A	3.1E-01	NC
				Benzo(k)fluoranthene	0.41	8.0E-09	NF	NF	NC	N/A	3.1E-02	NC
				Bis(2-ethylhexyl)phthalate	11	4.6E-07	NF	NF	NC	N/A	1.4E-02	NC
				Cadmium	9.1	2.0E-11	NF	NF	NC	N/A	6.3E+00	NC
				Chromium	111	2.5E-10	2.9E-05	1.0E-04	8.6E-06	N/A	4.2E+01	NC
				Chrysene	0.43	1.2E-07	NF	NF	NC	N/A	3.1E-03	NC
				Copper	116	2.6E-10	NF	NF	NC	N/A	N/A	NC
				Cyanide, total	3.5	7.7E-12	NF	NF	NC	N/A	N/A	NC
				Iron	45,866	1.0E-07	NF	NF	NC	N/A	N/A	NC
				Lead	98	2.2E-10	NF	NF	NC	N/A	N/A	NC
				Manganese	584	1.3E-09	1.4E-05	5.0E-05	9.1E-05	N/A	N/A	NC
				Mercury	7.3	1.7E-04	8.6E-05	3.0E-04	2.0E+00	N/A	N/A	NC
				Naphthalene	1.5	2.0E-05	8.6E-04	3.0E-03	2.4E-02	N/A	N/A	NC
				Nickel	53	1.2E-10	NF	NF	NC	N/A	N/A	NC
				Tetrachloroethene	0.080	1.9E-05	1.4E-01	NF	1.4E-04	N/A	1.0E-02	NC
				Thallium	0.91	2.0E-12	NF	NF	NC	N/A	N/A	NC
				Toxaphene	0.58	6.3E-08	NF	NF	NC	N/A	1.1E+00	NC
				Trichloroethene	0.10	2.9E-05	1.0E-02	NF	2.9E-03	N/A	4.0E-01	NC
				Vanadium	147	3.3E-10	NF	NF	NC	N/A	N/A	NC
				(Total)					2.0E+00			NC

TABLE 7.3a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 1 location	Ingestion	Aluminum	1.9	1.2E-01	1.0E+00	N/A	1.2E-01	N/A	N/A	NC
				Antimony	0.0062	4.0E-04	4.0E-04	N/A	9.9E-01	N/A	N/A	NC
				Arsenic	0.0050	3.2E-04	3.0E-04	N/A	1.1E+00	N/A	1.5E+00	NC
				Barium	0.27	1.7E-02	7.0E-02	N/A	2.5E-01	N/A	N/A	NC
				Benzene	0.021	1.4E-03	3.0E-03	N/A	4.6E-01	N/A	5.5E-02	NC
				Bis(2-ethylhexyl)phthalate	0.0051	3.3E-04	NF	N/A	NC	N/A	1.1E+00	NC
				Bromodichloromethane	0.00025	1.6E-05	2.0E-02	N/A	8.0E-04	N/A	6.2E-02	NC
				Carbon tetrachloride	0.0020	1.3E-04	7.0E-04	N/A	1.8E-01	N/A	1.3E-01	NC
				Chlorobenzene	0.0076	4.8E-04	2.0E-02	N/A	2.4E-02	N/A	N/A	NC
				Chloroethane	0.015	9.8E-04	4.0E-01	N/A	2.4E-03	N/A	2.9E-03	NC
				Chloroform	0.012	7.8E-04	1.0E-02	N/A	7.8E-02	N/A	N/A	NC
				Chromium	0.0078	5.0E-04	3.0E-03	N/A	1.7E-01	N/A	N/A	NC
				Cobalt	0.032	2.0E-03	2.0E-02	N/A	1.0E-01	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	5.3E-04	3.0E-02	N/A	1.8E-02	N/A	2.4E-02	NC
				Dichloroethane, 1,1-	0.053	3.4E-03	1.0E-01	N/A	3.4E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	0.013	8.6E-04	3.0E-02	N/A	2.9E-02	N/A	9.1E-02	NC
				Dichloroethene, 1,1-	0.018	1.2E-03	9.0E-03	N/A	1.3E-01	N/A	6.0E-01	NC
				Dichloroethene, 1,2- (cis)	0.41	2.6E-02	1.0E-02	N/A	2.6E+00	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	2.5E-04	2.0E-02	N/A	1.2E-02	N/A	N/A	NC
				Iron	5.1	3.3E-01	3.0E-01	N/A	1.1E+00	N/A	N/A	NC
				Manganese	2.9	1.9E-01	2.0E-02	N/A	9.3E+00	N/A	N/A	NC
				Methyl tert butyl ether	0.016	1.0E-03	3.0E-02	N/A	3.4E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	9.6E-04	6.0E-02	N/A	1.6E-02	N/A	2.0E-01	NC
				Tetrachloroethene	0.11	7.0E-03	1.0E-02	N/A	7.0E-01	N/A	5.2E-02	NC
				Thallium	0.0073	4.6E-04	7.0E-05	N/A	6.6E+00	N/A	N/A	NC
				Trichloroethane, 1,1,1-	0.072	4.6E-03	2.8E-01	N/A	1.6E-02	N/A	N/A	NC
				Trichloroethene	0.33	2.1E-02	3.0E-04	N/A	7.0E+01	N/A	4.0E-01	NC
				Vanadium	0.0040	2.5E-04	7.0E-03	N/A	3.6E-02	N/A	N/A	NC
				Vinyl chloride	0.031	2.0E-03	3.0E-03	N/A	6.7E-01	N/A	7.5E-01	NC
				(Total)					9.4E+01			NC
			Dermal and Inhalation	Aluminum	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Antimony	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Arsenic	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Barium	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Benzene	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Bromodichloromethane	N/A	N/A	N/A	8.0E-04	N/A	N/A	N/A	NC
				Carbon tetrachloride	N/A	N/A	N/A	1.8E-01	N/A	N/A	N/A	NC

TABLE 7.3a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 1 location	Dermal and Inhalation	Chlorobenzene	N/A	N/A	N/A	2.4E-02	N/A	N/A	NC	NC
				Chloroethane	N/A	N/A	N/A	2.4E-03	N/A	N/A	NC	NC
				Chloroform	N/A	N/A	N/A	7.8E-02	N/A	N/A	NC	NC
				Chromium	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Cobalt	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Dichlorobenzene, 1,4-	N/A	N/A	N/A	1.8E-02	N/A	N/A	NC	NC
				Dichloroethane, 1,1-	N/A	N/A	N/A	3.4E-02	N/A	N/A	NC	NC
				Dichloroethane, 1,2-	N/A	N/A	N/A	2.9E-02	N/A	N/A	NC	NC
				Dichloroethene, 1,1-	N/A	N/A	N/A	1.3E-01	N/A	N/A	NC	NC
				Dichloroethene, 1,2- (cis)	N/A	N/A	N/A	2.6E+00	N/A	N/A	NC	NC
				Dichloroethene, 1,2- (trans)	N/A	N/A	N/A	1.2E-02	N/A	N/A	NC	NC
				Iron	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Manganese	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Methyl tert butyl ether	N/A	N/A	N/A	3.4E-02	N/A	N/A	NC	NC
				Tetrachloroethane, 1,1,2,2-	N/A	N/A	N/A	1.6E-02	N/A	N/A	NC	NC
				Tetrachloroethylene	N/A	N/A	N/A	7.0E-01	N/A	N/A	NC	NC
				Thallium	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Trichloroethane, 1,1,1-	N/A	N/A	N/A	1.6E-02	N/A	N/A	NC	NC
				Trichloroethylene	N/A	N/A	N/A	7.0E+01	N/A	N/A	NC	NC
				Vanadium	N/A	N/A	N/A	NC	N/A	N/A	NC	NC
				Vinyl chloride	(Total)	EPC (mg/L)	N/A	6.7E-01	N/A	N/A	NC	NC
						0.000718	3.7E-03	1.7E-03	NF	1.8E+02	2.7E-02	NC
						0.0007872	4.1E-04	2.9E-02	0.1	7.5E+01	1.5E-02	NC
												NC
Landfill Gas	Air	Any Exposure Unit 1 location	Inhalation	Benzene	0.000718	3.7E-03	1.7E-03	2.2E+00	N/A	2.7E-02	NC	NC
				Vinyl chloride	(Total)	0.0007872	4.1E-04	2.9E-02	0.1	7.5E+01	1.5E-02	NC
Total Hazard Index Across All Exposure Routes/Pathways										1.8E+02	Total Cancer Risk	N/A

TABLE 7.3b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	3.6E-01	3.0E-01	N/A	1.2E+00	N/A	N/A	NC
				Manganese	254	3.2E-03	2.0E-02	N/A	1.6E-01	N/A	N/A	NC
				Thallium	0.77	9.8E-06	7.0E-05	N/A	1.4E-01	N/A	N/A	NC
				Vanadium	76	9.7E-04	7.0E-03	N/A	1.4E-01	N/A	N/A	NC
				(Total)					1.6E+00			NC
			Dermal	Iron	27,800	6.1E-04	2.6E-02	N/A	2.4E-02	N/A	N/A	NC
				Manganese	254	5.6E-06	8.0E-04	N/A	7.0E-03	N/A	N/A	NC
				Thallium	0.77	1.7E-08	1.4E-05	N/A	1.2E-03	N/A	N/A	NC
				Vanadium	76	1.7E-06	1.8E-04	N/A	9.2E-03	N/A	N/A	NC
				(Total)					4.1E-02			NC
	Air	Any Exposure Unit 2 location	Inhalation	Iron	27,800	6.2E-08	NF	NF	NC	N/A	N/A	NC
				Manganese	254	5.6E-10	1.4E-05	5.0E-05	3.9E-05	N/A	N/A	NC
				Thallium	0.77	1.7E-12	NF	NF	NC	N/A	N/A	NC
				Vanadium	76	1.7E-10	NF	NF	NC	N/A	N/A	NC
				(Total)					3.9E-05			NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion		EPC (mg/L)							
				Aluminum	1.9	1.2E-01	1.0E+00	N/A	1.2E-01	N/A	N/A	NC
				Antimony	0.0062	4.0E-04	4.0E-04	N/A	9.9E-01	N/A	N/A	NC
				Arsenic	0.0050	3.2E-04	3.0E-04	N/A	1.1E+00	N/A	1.5E+00	NC
				Barium	0.27	1.7E-02	7.0E-02	N/A	2.5E-01	N/A	N/A	NC
				Benzene	0.021	1.4E-03	3.0E-03	N/A	4.6E-01	N/A	5.5E-02	NC
				Bis(2-ethylhexyl)phthalate	0.0051	3.3E-04	NF	N/A	NC	N/A	1.1E+00	NC
				Bromodichloromethane	0.00025	1.6E-05	2.0E-02	N/A	8.0E-04	N/A	6.2E-02	NC
				Carbon tetrachloride	0.0020	1.3E-04	7.0E-04	N/A	1.8E-01	N/A	1.3E-01	NC
				Chlorobenzene	0.0076	4.8E-04	2.0E-02	N/A	2.4E-02	N/A	N/A	NC
				Chloroethane	0.015	9.8E-04	4.0E-01	N/A	2.4E-03	N/A	2.9E-03	NC
				Chloroform	0.012	7.8E-04	1.0E-02	N/A	7.8E-02	N/A	N/A	NC
				Chromium	0.0078	5.0E-04	3.0E-03	N/A	1.7E-01	N/A	N/A	NC
				Cobalt	0.032	2.0E-03	2.0E-02	N/A	1.0E-01	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	5.3E-04	3.0E-02	N/A	1.8E-02	N/A	2.4E-02	NC
				Dichloroethane, 1,1-	0.053	3.4E-03	1.0E-01	N/A	3.4E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	0.013	8.6E-04	3.0E-02	N/A	2.9E-02	N/A	9.1E-02	NC
				Dichloroethene, 1,1-	0.018	1.2E-03	9.0E-03	N/A	1.3E-01	N/A	6.0E-01	NC
				Dichloroethene, 1,2- (cis)	0.41	2.6E-02	1.0E-02	N/A	2.6E+00	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	2.5E-04	2.0E-02	N/A	1.2E-02	N/A	N/A	NC
				Iron	5.1	3.3E-01	3.0E-01	N/A	1.1E+00	N/A	N/A	NC
				Manganese	2.9	1.9E-01	2.0E-02	N/A	9.3E+00	N/A	N/A	NC
				Methyl tert butyl ether	0.016	1.0E-03	3.0E-02	N/A	3.4E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	9.6E-04	6.0E-02	N/A	1.6E-02	N/A	2.0E-01	NC

TABLE 7.3b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Tetrachloroethene	0.11	7.0E-03	1.0E-02	N/A	7.0E-01	N/A	5.2E-02	NC
				Thallium	0.0073	4.6E-04	7.0E-05	N/A	6.6E+00	N/A	N/A	NC
				Trichloroethane, 1,1,1-	0.072	4.6E-03	2.8E-01	N/A	1.6E-02	N/A	N/A	NC
				Trichloroethene	0.33	2.1E-02	3.0E-04	N/A	7.0E+01	N/A	4.0E-01	NC
				Vanadium	0.0040	2.5E-04	7.0E-03	N/A	3.6E-02	N/A	N/A	NC
				Vinyl chloride	0.031	2.0E-03	3.0E-03	N/A	6.7E-01	N/A	7.5E-01	NC
				(Total)					9.4E+01			NC
			Dermal and Inhalation	Aluminum	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Antimony	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Arsenic	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Barium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Benzene	N/A	N/A	N/A	N/A	4.6E-01	N/A	N/A	NC
				Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Bromodichloromethane	N/A	N/A	N/A	N/A	8.0E-04	N/A	N/A	NC
				Carbon tetrachloride	N/A	N/A	N/A	N/A	1.8E-01	N/A	N/A	NC
				Chlorobenzene	N/A	N/A	N/A	N/A	2.4E-02	N/A	N/A	NC
				Chloroethane	N/A	N/A	N/A	N/A	2.4E-03	N/A	N/A	NC
				Chloroform	N/A	N/A	N/A	N/A	7.8E-02	N/A	N/A	NC
				Chromium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Cobalt	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichlorobenzene, 1,4-	N/A	N/A	N/A	N/A	1.8E-02	N/A	N/A	NC
				Dichloroethane, 1,1-	N/A	N/A	N/A	N/A	3.4E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	N/A	N/A	N/A	N/A	2.9E-02	N/A	N/A	NC
				Dichloroethene, 1,1-	N/A	N/A	N/A	N/A	1.3E-01	N/A	N/A	NC
				Dichloroethene, 1,2- (cis)	N/A	N/A	N/A	N/A	2.6E+00	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	N/A	N/A	N/A	N/A	1.2E-02	N/A	N/A	NC
				Iron	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Manganese	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Methyl tert butyl ether	N/A	N/A	N/A	N/A	3.4E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	N/A	N/A	N/A	N/A	1.6E-02	N/A	N/A	NC
				Tetrachloroethene	N/A	N/A	N/A	N/A	7.0E-01	N/A	N/A	NC

TABLE 7.3b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 2 location	Dermal and Inhalation	Thallium Trichloroethane, 1,1,1-Trichloroethene Vanadium Vinyl chloride	EPC (mg/L)							
					N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
					N/A	N/A	N/A	N/A	1.6E-02	N/A	N/A	NC
					N/A	N/A	N/A	N/A	7.0E+01	N/A	N/A	NC
					N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
					N/A	N/A	N/A	N/A	6.7E-01	N/A	N/A	NC
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene Vinyl chloride	EPC (mg/m ³)							
					0.000718	3.7E-03	1.7E-03	NF	2.2E+00	N/A	2.7E-02	NC
					0.0007872	4.1E-04	2.9E-02	0.1	1.4E-02	N/A	1.5E-02	NC
									2.2E+00			NC
Total Hazard Index Across All Exposure Routes/Pathways										1.7E+02	Total Cancer Risk	N/A

TABLE 7.4a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	8.8E-09	3.0E-05	N/A	2.9E-04	N/A	1.7E+01	NC
				Aluminum	47,785	6.5E-02	1.0E+00	N/A	6.5E-02	N/A	N/A	NC
				Antimony	2.3	3.1E-06	4.0E-04	N/A	7.7E-03	N/A	N/A	NC
				Aroclor-1242	0.12	1.6E-07	2.0E-05	N/A	8.0E-03	N/A	2.0E+00	NC
				Aroclor-1248	0.30	4.1E-07	2.0E-05	N/A	2.1E-02	N/A	2.0E+00	NC
				Aroclor-1254	0.28	3.8E-07	2.0E-05	N/A	1.9E-02	N/A	2.0E+00	NC
				Arsenic	3.1	4.3E-06	3.0E-04	N/A	1.4E-02	N/A	1.5E+00	NC
				Barium	1,668	2.3E-03	7.0E-02	N/A	3.3E-02	N/A	N/A	NC
				Benzo(a)anthracene	0.37	5.1E-07	NF	N/A	NC	N/A	7.3E-01	NC
				Benzo(a)pyrene	0.58	7.9E-07	NF	N/A	NC	N/A	7.3E+00	NC
				Benzo(b)fluoranthene	0.59	8.0E-07	NF	N/A	NC	N/A	7.3E-01	NC
				Benzo(k)fluoranthene	0.41	5.6E-07	NF	N/A	NC	N/A	7.3E-02	NC
				Bis(2-ethylhexyl)phthalate	11	1.5E-05	2.0E-02	N/A	7.5E-04	N/A	1.4E-02	NC
				Cadmium	9.1	1.2E-05	1.0E-03	N/A	1.2E-02	N/A	N/A	NC
				Chromium	111	1.5E-04	3.0E-03	N/A	5.1E-02	N/A	N/A	NC
				Chrysene	0.43	5.9E-07	NF	N/A	NC	N/A	7.3E-03	NC
				Copper	116	1.6E-04	4.0E-02	N/A	4.0E-03	N/A	N/A	NC
				Cyanide, total	3.5	4.7E-06	2.0E-02	N/A	2.4E-04	N/A	N/A	NC
				Iron	45,866	6.3E-02	3.0E-01	N/A	2.1E-01	N/A	N/A	NC
				Lead	98	1.3E-04	NF	N/A	NC	N/A	N/A	NC
				Manganese	584	8.0E-04	2.0E-02	N/A	4.0E-02	N/A	N/A	NC
				Mercury	7.3	9.9E-06	3.0E-04	N/A	3.3E-02	N/A	N/A	NC
				Naphthalene	1.5	2.0E-06	2.0E-02	N/A	1.0E-04	N/A	N/A	NC
				Nickel	53	7.3E-05	2.0E-02	N/A	3.6E-03	N/A	N/A	NC
				Tetrachloroethene	0.080	1.1E-07	1.0E-02	N/A	1.1E-05	N/A	5.2E-02	NC
				Thallium	0.91	1.2E-06	7.0E-05	N/A	1.8E-02	N/A	N/A	NC
				Toxaphene	0.58	7.9E-07	NF	N/A	NC	N/A	1.1E+00	NC
				Trichloroethene	0.10	1.3E-07	3.0E-04	N/A	4.5E-04	N/A	4.0E-01	NC
				Vanadium	147	2.0E-04	7.0E-03	N/A	2.9E-02	N/A	N/A	NC
				(Total)					5.7E-01			NC
			Dermal	Aldrin	0.0065	8.0E-10	3.0E-05	N/A	2.7E-05	N/A	1.7E+01	NC
				Aluminum	47,785	5.9E-04	4.0E-02	N/A	1.5E-02	N/A	N/A	NC
				Antimony	2.3	2.8E-08	4.0E-06	N/A	7.0E-03	N/A	N/A	NC
				Aroclor-1242	0.12	1.4E-08	1.7E-05	N/A	8.5E-04	N/A	2.4E+00	NC
				Aroclor-1248	0.30	3.7E-08	1.7E-05	N/A	2.2E-03	N/A	2.4E+00	NC
				Aroclor-1254	0.28	3.4E-08	1.7E-05	N/A	2.0E-03	N/A	2.4E+00	NC
				Arsenic	3.1	3.9E-08	2.9E-04	N/A	1.4E-04	N/A	1.6E+00	NC
				Barium	1,668	2.1E-05	3.5E-03	N/A	5.9E-03	N/A	N/A	NC
				Benzo(a)anthracene	0.37	4.6E-08	NF	N/A	NC	N/A	1.5E+00	NC
				Benzo(a)pyrene	0.58	7.1E-08	NF	N/A	NC	N/A	1.5E+01	NC
				Benzo(b)fluoranthene	0.59	7.3E-08	NF	N/A	NC	N/A	1.5E+00	NC
				Benzo(k)fluoranthene	0.41	5.1E-08	NF	N/A	NC	N/A	1.5E-01	NC
				Bis(2-ethylhexyl)phthalate	11	1.4E-06	1.0E-02	N/A	1.4E-04	N/A	2.8E-02	NC
				Cadmium	9.1	1.1E-07	4.4E-05	N/A	2.6E-03	N/A	N/A	NC
				Chromium	111	1.4E-06	3.9E-05	N/A	3.5E-02	N/A	N/A	NC
				Chrysene	0.43	5.3E-08	NF	N/A	NC	N/A	1.5E-02	NC
				Copper	116	1.4E-06	2.2E-02	N/A	6.4E-05	N/A	N/A	NC

TABLE 7.4a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Cyanide, total	3.5	4.3E-08	2.0E-02	N/A	2.1E-06	N/A	N/A	NC
				Iron	45,866	5.7E-04	2.6E-02	N/A	2.2E-02	N/A	N/A	NC
				Lead	98	1.2E-06	NF	N/A	NC	N/A	N/A	NC
				Manganese	584	7.2E-06	8.0E-04	N/A	9.0E-03	N/A	N/A	NC
				Mercury	7.3	9.0E-08	3.0E-05	N/A	3.0E-03	N/A	N/A	NC
				Naphthalene	1.5	1.8E-07	2.0E-02	N/A	9.0E-06	N/A	N/A	NC
				Nickel	53	6.6E-07	1.0E-03	N/A	6.6E-04	N/A	N/A	NC
				Tetrachloroethene	0.080	9.9E-09	1.0E-02	N/A	9.9E-07	N/A	5.2E-02	NC
				Thallium	0.91	1.1E-08	1.4E-05	N/A	8.0E-04	N/A	N/A	NC
				Toxaphene	0.58	7.1E-08	NF	N/A	NC	N/A	2.2E+00	NC
				Trichloroethene	0.10	1.2E-08	2.8E-04	N/A	4.3E-05	N/A	4.2E-01	NC
				Vanadium	147	1.8E-06	1.8E-04	N/A	1.0E-02	N/A	N/A	NC
				(Total)					1.2E-01			NC
	Air	Any Exposure Unit 1 location	Inhalation	Aldrin	0.0065	1.8E-09	NF	NF	NC	N/A	1.7E+01	NC
				Aluminum	47,785	3.7E-08	1.0E-03	NF	3.7E-05	N/A	N/A	NC
				Antimony	2.3	1.8E-12	NF	NF	NC	N/A	N/A	NC
				Aroclor-1242	0.12	5.8E-08	NF	NF	NC	N/A	4.0E-01	NC
				Aroclor-1248	0.30	1.5E-07	NF	NF	NC	N/A	4.0E-01	NC
				Aroclor-1254	0.28	1.4E-07	NF	NF	NC	N/A	4.0E-01	NC
				Arsenic	3.1	2.4E-12	NF	NF	NC	N/A	1.5E+01	NC
				Barium	1,668	1.3E-09	1.4E-04	5.0E-04	9.1E-06	N/A	N/A	NC
				Benzo(a)anthracene	0.37	1.1E-08	NF	NF	NC	N/A	3.1E-01	NC
				Benzo(a)pyrene	0.58	6.5E-09	NF	NF	NC	N/A	3.1E+00	NC
				Benzo(b)fluoranthene	0.59	3.6E-09	NF	NF	NC	N/A	3.1E-01	NC
				Benzo(k)fluoranthene	0.41	2.8E-09	NF	NF	NC	N/A	3.1E-02	NC
				Bis(2-ethylhexyl)phthalate	11	1.6E-07	NF	NF	NC	N/A	1.4E-02	NC
				Cadmium	9.1	7.1E-12	NF	NF	NC	N/A	6.3E+00	NC
				Chromium	111	8.6E-11	2.9E-05	1.0E-04	3.0E-06	N/A	4.2E+01	NC
				Chrysene	0.43	4.3E-08	NF	NF	NC	N/A	3.1E-03	NC
				Copper	116	9.0E-11	NF	NF	NC	N/A	N/A	NC
				Cyanide, total	3.5	2.7E-12	NF	NF	NC	N/A	N/A	NC
				Iron	45,866	3.6E-08	NF	NF	NC	N/A	N/A	NC
				Lead	98	7.6E-11	NF	NF	NC	N/A	N/A	NC
				Manganese	584	4.5E-10	1.4E-05	5.0E-05	3.2E-05	N/A	N/A	NC
				Mercury	7.3	6.0E-05	8.6E-05	3.0E-04	7.0E-01	N/A	N/A	NC
				Naphthalene	1.5	7.1E-06	8.6E-04	3.0E-03	8.3E-03	N/A	N/A	NC
				Nickel	53	4.1E-11	NF	NF	NC	N/A	N/A	NC
				Tetrachloroethene	0.080	6.8E-06	1.4E-01	NF	4.9E-05	N/A	1.0E-02	NC
				Thallium	0.91	7.1E-13	NF	NF	NC	N/A	N/A	NC
				Toxaphene	0.58	2.2E-08	NF	NF	NC	N/A	1.1E+00	NC
				Trichloroethene	0.10	1.0E-05	1.0E-02	NF	1.0E-03	N/A	4.0E-01	NC
				Vanadium	147	1.1E-10	NF	NF	NC	N/A	N/A	NC
				(Total)					7.1E-01			NC
Groundwater	Groundwater	Any Exposure Unit 1 location	Ingestion		EPC (mg/L)							
				Aluminum	1.9	5.2E-02	1.0E+00	N/A	5.2E-02	N/A	N/A	NC
				Antimony	0.0062	1.7E-04	4.0E-04	N/A	4.2E-01	N/A	N/A	NC
				Arsenic	0.0050	1.4E-04	3.0E-04	N/A	4.6E-01	N/A	1.5E+00	NC

TABLE 7.4a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 1 location	Ingestion	Barium	0.27	7.4E-03	7.0E-02	N/A	1.1E-01	N/A	N/A	NC
				Benzene	0.021	5.9E-04	3.0E-03	N/A	2.0E-01	N/A	5.5E-02	NC
				Bis(2-ethylhexyl)phthalate	0.0051	1.4E-04	NF	N/A	NC	N/A	1.1E+00	NC
				Bromodichloromethane	0.00025	6.8E-06	2.0E-02	N/A	3.4E-04	N/A	6.2E-02	NC
				Carbon tetrachloride	0.0020	5.5E-05	7.0E-04	N/A	7.8E-02	N/A	1.3E-01	NC
				Chlorobenzene	0.0076	2.1E-04	2.0E-02	N/A	1.0E-02	N/A	N/A	NC
				Chloroethane	0.015	4.2E-04	4.0E-01	N/A	1.0E-03	N/A	2.9E-03	NC
				Chloroform	0.012	3.3E-04	1.0E-02	N/A	3.3E-02	N/A	N/A	NC
				Chromium	0.0078	2.1E-04	3.0E-03	N/A	7.1E-02	N/A	N/A	NC
				Cobalt	0.032	8.7E-04	2.0E-02	N/A	4.4E-02	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	2.3E-04	3.0E-02	N/A	7.6E-03	N/A	2.4E-02	NC
				Dichloroethane, 1,1-	0.053	1.5E-03	1.0E-01	N/A	1.5E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	0.013	3.7E-04	3.0E-02	N/A	1.2E-02	N/A	9.1E-02	NC
				Dichloroethene, 1,1-	0.018	5.0E-04	9.0E-03	N/A	5.6E-02	N/A	6.0E-01	NC
				Dichloroethene, 1,2- (cis)	0.41	1.1E-02	1.0E-02	N/A	1.1E+00	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	1.1E-04	2.0E-02	N/A	5.3E-03	N/A	N/A	NC
				Iron	5.1	1.4E-01	3.0E-01	N/A	4.7E-01	N/A	N/A	NC
				Manganese	2.9	7.9E-02	2.0E-02	N/A	4.0E+00	N/A	N/A	NC
				Methyl tert butyl ether	0.016	4.4E-04	3.0E-02	N/A	1.5E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	4.1E-04	6.0E-02	N/A	6.9E-03	N/A	2.0E-01	NC
				Tetrachloroethene	0.11	3.0E-03	1.0E-02	N/A	3.0E-01	N/A	5.2E-02	NC
				Thallium	0.0073	2.0E-04	7.0E-05	N/A	2.8E+00	N/A	N/A	NC
				Trichloroethane, 1,1,1-	0.072	2.0E-03	2.8E-01	N/A	7.0E-03	N/A	N/A	NC
				Trichloroethene	0.33	8.9E-03	3.0E-04	N/A	3.0E+01	N/A	4.0E-01	NC
				Vanadium	0.0040	1.1E-04	7.0E-03	N/A	1.5E-02	N/A	N/A	NC
				Vinyl chloride	0.031	8.6E-04	3.0E-03	N/A	2.9E-01	N/A	7.5E-01	NC
				(Total)					4.0E+01			NC
	Dermal and Inhalation	Dermal and Inhalation	Dermal and Inhalation	Aluminum	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Antimony	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Arsenic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NC
				Barium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Benzene	N/A	N/A	N/A	N/A	2.0E-01	N/A	N/A	NC
				Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Bromodichloromethane	N/A	N/A	N/A	N/A	3.4E-04	N/A	N/A	NC
				Carbon tetrachloride	N/A	N/A	N/A	N/A	7.8E-02	N/A	N/A	NC
				Chlorobenzene	N/A	N/A	N/A	N/A	1.0E-02	N/A	N/A	NC
				Chloroethane	N/A	N/A	N/A	N/A	1.0E-03	N/A	N/A	NC
				Chloroform	N/A	N/A	N/A	N/A	3.3E-02	N/A	N/A	NC
				Chromium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Cobalt	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichlorobenzene, 1,4-	N/A	N/A	N/A	N/A	7.6E-03	N/A	N/A	NC

**TABLE 7.4a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE**

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

TABLE 7.4b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	3.8E-02	3.0E-01	N/A	1.3E-01	N/A	N/A	NC
				Manganese	254	3.5E-04	2.0E-02	N/A	1.7E-02	N/A	N/A	NC
				Thallium	0.77	1.1E-06	7.0E-05	N/A	1.5E-02	N/A	N/A	NC
			Dermal	Vanadium	76	1.0E-04	7.0E-03	N/A	1.5E-02	N/A	N/A	NC
				(Total)					1.7E-01			NC
	Air	Any Exposure Unit 2 location	Inhalation	Iron	27,800	3.4E-04	2.6E-02	N/A	1.3E-02	N/A	N/A	NC
				Manganese	254	3.1E-06	8.0E-04	N/A	3.9E-03	N/A	N/A	NC
				Thallium	0.77	9.5E-09	1.4E-05	N/A	6.8E-04	N/A	N/A	NC
				Vanadium	76	9.4E-07	1.8E-04	N/A	5.2E-03	N/A	N/A	NC
				(Total)					2.3E-02			NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Aluminum	EPC (mg/L)	5.2E-02	1.0E+00	N/A	5.2E-02	N/A	N/A	NC
				Antimony	1.9	1.7E-04	4.0E-04	N/A	4.2E-01	N/A	N/A	NC
				Arsenic	0.0062	1.4E-04	3.0E-04	N/A	4.6E-01	N/A	1.5E+00	NC
				Barium	0.0050	7.4E-03	7.0E-02	N/A	1.1E-01	N/A	N/A	NC
				Benzene	0.27	5.9E-04	3.0E-03	N/A	2.0E-01	N/A	5.5E-02	NC
				Bis(2-ethylhexyl)phthalate	0.0051	1.4E-04	NF	N/A	NC	N/A	1.1E+00	NC
				Bromodichloromethane	0.00025	6.8E-06	2.0E-02	N/A	3.4E-04	N/A	6.2E-02	NC
				Carbon tetrachloride	0.0020	5.5E-05	7.0E-04	N/A	7.8E-02	N/A	1.3E-01	NC
				Chlorobenzene	0.0076	2.1E-04	2.0E-02	N/A	1.0E-02	N/A	N/A	NC
				Chloroethane	0.015	4.2E-04	4.0E-01	N/A	1.0E-03	N/A	2.9E-03	NC
				Chloroform	0.012	3.3E-04	1.0E-02	N/A	3.3E-02	N/A	N/A	NC
				Chromium	0.0078	2.1E-04	3.0E-03	N/A	7.1E-02	N/A	N/A	NC
				Cobalt	0.032	8.7E-04	2.0E-02	N/A	4.4E-02	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	2.3E-04	3.0E-02	N/A	7.6E-03	N/A	2.4E-02	NC
				Dichloroethane, 1,1-	0.053	1.5E-03	1.0E-01	N/A	1.5E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	0.013	3.7E-04	3.0E-02	N/A	1.2E-02	N/A	9.1E-02	NC
				Dichloroethene, 1,1-	0.018	5.0E-04	9.0E-03	N/A	5.6E-02	N/A	6.0E-01	NC
				Dichloroethene, 1,2-(cis)	0.41	1.1E-02	1.0E-02	N/A	1.1E+00	N/A	N/A	NC
				Dichloroethene, 1,2-(trans)	0.0039	1.1E-04	2.0E-02	N/A	5.3E-03	N/A	N/A	NC
				Iron	5.1	1.4E-01	3.0E-01	N/A	4.7E-01	N/A	N/A	NC
				Manganese	2.9	7.9E-02	2.0E-02	N/A	4.0E+00	N/A	N/A	NC
				Methyl tert butyl ether	0.016	4.4E-04	3.0E-02	N/A	1.5E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	4.1E-04	6.0E-02	N/A	6.9E-03	N/A	2.0E-01	NC

TABLE 7.4b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Tetrachloroethene	0.11	3.0E-03	1.0E-02	N/A	3.0E-01	N/A	5.2E-02	NC
				Thallium	0.0073	2.0E-04	7.0E-05	N/A	2.8E+00	N/A	N/A	NC
				Trichloroethane, 1,1,1-	0.072	2.0E-03	2.8E-01	N/A	7.0E-03	N/A	N/A	NC
				Trichloroethene	0.33	8.9E-03	3.0E-04	N/A	3.0E+01	N/A	4.0E-01	NC
				Vanadium	0.0040	1.1E-04	7.0E-03	N/A	1.5E-02	N/A	N/A	NC
				Vinyl chloride	0.031	8.6E-04	3.0E-03	N/A	2.9E-01	N/A	7.5E-01	NC
			Dermal and Inhalation	(Total)					4.0E+01			NC
				Aluminum	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Antimony	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Arsenic	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Barium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Benzene	N/A	N/A	N/A	N/A	2.0E-01	N/A	N/A	NC
				Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Bromodichloromethane	N/A	N/A	N/A	N/A	3.4E-04	N/A	N/A	NC
				Carbon tetrachloride	N/A	N/A	N/A	N/A	7.8E-02	N/A	N/A	NC
				Chlorobenzene	N/A	N/A	N/A	N/A	1.0E-02	N/A	N/A	NC
				Chloroethane	N/A	N/A	N/A	N/A	1.0E-03	N/A	N/A	NC
				Chloroform	N/A	N/A	N/A	N/A	3.3E-02	N/A	N/A	NC
				Chromium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Cobalt	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichlorobenzene, 1,4-	N/A	N/A	N/A	N/A	7.6E-03	N/A	N/A	NC
				Dichloroethane, 1,1-	N/A	N/A	N/A	N/A	1.5E-02	N/A	N/A	NC
				Dichloroethane, 1,2-	N/A	N/A	N/A	N/A	1.2E-02	N/A	N/A	NC
				Dichloroethene, 1,1-	N/A	N/A	N/A	N/A	5.6E-02	N/A	N/A	NC
				Dichloroethene, 1,2- (cis)	N/A	N/A	N/A	N/A	1.1E+00	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	N/A	N/A	N/A	N/A	5.3E-03	N/A	N/A	NC
				Iron	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Manganese	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Methyl tert butyl ether	N/A	N/A	N/A	N/A	1.5E-02	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	N/A	N/A	N/A	N/A	6.9E-03	N/A	N/A	NC
				Tetrachloroethene	N/A	N/A	N/A	N/A	3.0E-01	N/A	N/A	NC
				Thallium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Trichloroethane, 1,1,1-	N/A	N/A	N/A	N/A	7.0E-03	N/A	N/A	NC
				Trichloroethene	N/A	N/A	N/A	N/A	3.0E+01	N/A	N/A	NC
				Vanadium	N/A	N/A	N/A	N/A	NC	N/A	N/A	NC
				Vinyl chloride	N/A	N/A	N/A	N/A	2.9E-01	N/A	N/A	NC
				(Total)					3.2E+01			NC

TABLE 7.4b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene Vinyl chloride (Total)	EPC (mg/m ³) 0.000718 0.0007872	1.3E-03 1.4E-04	1.7E-03 2.9E-02	NF 0.1	7.6E-01 5.0E-03 7.7E-01	N/A N/A	2.7E-02 1.5E-02	NC NC NC
Total Hazard Index Across All Exposure Routes/Pathways									7.3E+01	Total Cancer Risk		N/A

TABLE 7.5a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	N/A	3.0E-05	N/A	NC	5.4E-09	1.7E+01	9.2E-08
				Aluminum	47,785	N/A	1.0E+00	N/A	NC	4.0E-02	N/A	NC
				Antimony	2.3	N/A	4.0E-04	N/A	NC	1.9E-06	N/A	NC
				Aroclor-1242	0.12	N/A	2.0E-05	N/A	NC	9.8E-08	2.0E+00	2.0E-07
				Aroclor-1248	0.30	N/A	2.0E-05	N/A	NC	2.5E-07	2.0E+00	5.0E-07
				Aroclor-1254	0.28	N/A	2.0E-05	N/A	NC	2.3E-07	2.0E+00	4.7E-07
				Arsenic	3.1	N/A	3.0E-04	N/A	NC	2.6E-06	1.5E+00	3.9E-06
				Barium	1,668	N/A	7.0E-02	N/A	NC	1.4E-03	N/A	NC
				Benzo(a)anthracene	0.37	N/A	NF	N/A	NC	3.1E-07	7.3E-01	2.3E-07
				Benzo(a)pyrene	0.58	N/A	NF	N/A	NC	4.8E-07	7.3E+00	3.5E-06
				Benzo(b)fluoranthene	0.59	N/A	NF	N/A	NC	4.9E-07	7.3E-01	3.6E-07
				Benzo(k)fluoranthene	0.41	N/A	NF	N/A	NC	3.4E-07	7.3E-02	2.5E-08
				Bis(2-ethylhexyl)phthalate	11	N/A	2.0E-02	N/A	NC	9.2E-06	1.4E-02	1.3E-07
				Cadmium	9.1	N/A	1.0E-03	N/A	NC	7.6E-06	N/A	NC
				Chromium	111	N/A	3.0E-03	N/A	NC	9.3E-05	N/A	NC
				Chrysene	0.43	N/A	NF	N/A	NC	3.6E-07	7.3E-03	2.6E-09
				Copper	116	N/A	4.0E-02	N/A	NC	9.7E-05	N/A	NC
				Cyanide, total	3.5	N/A	2.0E-02	N/A	NC	2.9E-06	N/A	NC
				Iron	45,866	N/A	3.0E-01	N/A	NC	3.8E-02	N/A	NC
				Lead	98	N/A	NF	N/A	NC	8.2E-05	N/A	NC
				Manganese	584	N/A	2.0E-02	N/A	NC	4.9E-04	N/A	NC
				Mercury	7.3	N/A	3.0E-04	N/A	NC	6.1E-06	N/A	NC
				Naphthalene	1.5	N/A	2.0E-02	N/A	NC	1.2E-06	N/A	NC
				Nickel	53	N/A	2.0E-02	N/A	NC	4.5E-05	N/A	NC
				Tetrachloroethene	0.080	N/A	1.0E-02	N/A	NC	6.7E-08	5.2E-02	3.5E-09
				Thallium	0.91	N/A	7.0E-05	N/A	NC	7.6E-07	N/A	NC
				Toxaphene	0.58	N/A	NF	N/A	NC	4.8E-07	1.1E+00	5.3E-07
				Trichloroethene	0.10	N/A	3.0E-04	N/A	NC	8.2E-08	4.0E-01	3.3E-08
				Vanadium	147	N/A	7.0E-03	N/A	NC	1.2E-04	N/A	NC
				(Total)					NC			1.0E-05
			Dermal	Aldrin	0.0065	N/A	3.0E-05	N/A	NC	3.6E-10	1.7E+01	6.0E-09
				Aluminum	47,785	N/A	4.0E-02	N/A	NC	2.6E-04	N/A	NC
				Antimony	2.3	N/A	4.0E-06	N/A	NC	1.2E-08	N/A	NC
				Aroclor-1242	0.12	N/A	1.7E-05	N/A	NC	6.4E-09	2.4E+00	1.5E-08
				Aroclor-1248	0.30	N/A	1.7E-05	N/A	NC	1.7E-08	2.4E+00	3.9E-08
				Aroclor-1254	0.28	N/A	1.7E-05	N/A	NC	1.5E-08	2.4E+00	3.6E-08
				Arsenic	3.1	N/A	2.9E-04	N/A	NC	1.7E-08	1.6E+00	2.7E-08
				Barium	1,668	N/A	3.5E-03	N/A	NC	9.2E-06	N/A	NC
				Benzo(a)anthracene	0.37	N/A	NF	N/A	NC	2.0E-08	1.5E+00	3.0E-08
				Benzo(a)pyrene	0.58	N/A	NF	N/A	NC	3.2E-08	1.5E+01	4.6E-07
				Benzo(b)fluoranthene	0.59	N/A	NF	N/A	NC	3.2E-08	1.5E+00	4.7E-08
				Benzo(k)fluoranthene	0.41	N/A	NF	N/A	NC	2.3E-08	1.5E-01	3.3E-09
				Bis(2-ethylhexyl)phthalate	11	N/A	1.0E-02	N/A	NC	6.0E-07	2.8E-02	1.7E-08
				Cadmium	9.1	N/A	4.4E-05	N/A	NC	5.0E-08	N/A	NC
				Chromium	111	N/A	3.9E-05	N/A	NC	6.1E-07	N/A	NC
				Chrysene	0.43	N/A	NF	N/A	NC	2.4E-08	1.5E-02	3.5E-10
				Copper	116	N/A	2.2E-02	N/A	NC	6.4E-07	N/A	NC

TABLE 7.5a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Cyanide, total	3.5	N/A	2.0E-02	N/A	NC	1.9E-08	N/A	NC
				Iron	45,866	N/A	2.6E-02	N/A	NC	2.5E-04	N/A	NC
				Lead	98	N/A	NF	N/A	NC	5.4E-07	N/A	NC
				Manganese	584	N/A	8.0E-04	N/A	NC	3.2E-06	N/A	NC
				Mercury	7.3	N/A	3.0E-05	N/A	NC	4.0E-08	N/A	NC
				Naphthalene	1.5	N/A	2.0E-02	N/A	NC	8.0E-08	N/A	NC
				Nickel	53	N/A	1.0E-03	N/A	NC	2.9E-07	N/A	NC
				Tetrachloroethene	0.080	N/A	1.0E-02	N/A	NC	4.4E-09	5.2E-02	2.3E-10
				Thallium	0.91	N/A	1.4E-05	N/A	NC	5.0E-09	N/A	NC
				Toxaphene	0.58	N/A	NF	N/A	NC	3.2E-08	2.2E+00	7.0E-08
	Air	Any Exposure Unit 1 location	Inhalation	Trichloroethene	0.10	N/A	2.8E-04	N/A	NC	5.4E-09	4.2E-01	2.3E-09
				Vanadium	147	N/A	1.8E-04	N/A	NC	8.1E-07	N/A	NC
				(Total)					NC			7.6E-07
				Aldrin	0.0065	N/A	NF	NF	NC	8.5E-10	1.7E+01	1.5E-08
				Aluminum	47,785	N/A	1.0E-03	NF	NC	1.7E-08	N/A	NC
				Antimony	2.3	N/A	NF	NF	NC	8.2E-13	N/A	NC
				Aroclor-1242	0.12	N/A	NF	NF	NC	2.7E-08	4.0E-01	1.1E-08
				Aroclor-1248	0.30	N/A	NF	NF	NC	7.0E-08	4.0E-01	2.8E-08
				Aroclor-1254	0.28	N/A	NF	NF	NC	6.5E-08	4.0E-01	2.6E-08
				Arsenic	3.1	N/A	NF	NF	NC	1.1E-12	1.5E+01	1.7E-11
				Barium	1,668	N/A	1.4E-04	5.0E-04	NC	6.1E-10	N/A	NC
				Benzo(a)anthracene	0.37	N/A	NF	NF	NC	5.0E-09	3.1E-01	1.6E-09
				Benzo(a)pyrene	0.58	N/A	NF	NF	NC	3.0E-09	3.1E+00	9.4E-09
				Benzo(b)fluoranthene	0.59	N/A	NF	NF	NC	1.7E-09	3.1E-01	5.2E-10
				Benzo(k)fluoranthene	0.41	N/A	NF	NF	NC	1.3E-09	3.1E-02	4.1E-11
				Bis(2-ethylhexyl)phthalate	11	N/A	NF	NF	NC	7.5E-08	1.4E-02	1.1E-09
				Cadmium	9.1	N/A	NF	NF	NC	3.3E-12	6.3E+00	2.1E-11
				Chromium	111	N/A	2.9E-05	1.0E-04	NC	4.0E-11	4.2E+01	1.7E-09
				Chrysene	0.43	N/A	NF	NF	NC	2.0E-08	3.1E-03	6.2E-11
				Copper	116	N/A	NF	NF	NC	4.2E-11	N/A	NC
				Cyanide, total	3.5	N/A	NF	NF	NC	1.3E-12	N/A	NC
				Iron	45,866	N/A	NF	NF	NC	1.7E-08	N/A	NC
				Lead	98	N/A	NF	NF	NC	3.6E-11	N/A	NC
				Manganese	584	N/A	1.4E-05	5.0E-05	NC	2.1E-10	N/A	NC
				Mercury	7.3	N/A	8.6E-05	3.0E-04	NC	2.8E-05	N/A	NC
				Naphthalene	1.5	N/A	8.6E-04	3.0E-03	NC	3.3E-06	N/A	NC
				Nickel	53	N/A	NF	NF	NC	1.9E-11	N/A	NC
				Tetrachloroethene	0.080	N/A	1.4E-01	NF	NC	3.2E-06	1.0E-02	3.2E-08
				Thallium	0.91	N/A	NF	NF	NC	3.3E-13	N/A	NC
				Toxaphene	0.58	N/A	NF	NF	NC	1.0E-08	1.1E+00	1.2E-08
				Trichloroethene	0.10	N/A	1.0E-02	NF	NC	4.8E-06	4.0E-01	1.9E-06
				Vanadium	147	N/A	NF	NF	NC	5.4E-11	N/A	NC
				(Total)					NC			2.0E-06
Groundwater	Groundwater	Any Exposure Unit 1 location	Ingestion	Aluminum	1.9	N/A	N/A	N/A	NC	2.4E-02	N/A	NC
				Antimony	0.0062	N/A	N/A	N/A	NC	7.8E-05	N/A	NC
				Arsenic	0.0050	N/A	N/A	N/A	NC	6.3E-05	1.5E+00	9.4E-05

TABLE 7.5a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 1 location	Ingestion	Barium	0.27	N/A	N/A	N/A	NC	3.4E-03	N/A	NC
				Benzene	0.021	N/A	N/A	N/A	NC	2.7E-04	5.5E-02	1.5E-05
				Bis(2-ethylhexyl)phthalate	0.0051	N/A	N/A	N/A	NC	6.4E-05	1.1E+00	7.1E-05
				Bromodichloromethane	0.00025	N/A	N/A	N/A	NC	3.1E-06	6.2E-02	1.9E-07
				Carbon tetrachloride	0.0020	N/A	N/A	N/A	NC	2.5E-05	1.3E-01	3.3E-06
				Chlorobenzene	0.0076	N/A	N/A	N/A	NC	9.5E-05	N/A	NC
				Chloroethane	0.015	N/A	N/A	N/A	NC	1.9E-04	2.9E-03	5.6E-07
				Chloroform	0.012	N/A	N/A	N/A	NC	1.5E-04	N/A	NC
				Chromium	0.0078	N/A	N/A	N/A	NC	9.7E-05	N/A	NC
				Cobalt	0.032	N/A	N/A	N/A	NC	4.0E-04	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	N/A	N/A	N/A	NC	1.0E-04	2.4E-02	2.5E-06
				Dichloroethane, 1,1-	0.053	N/A	N/A	N/A	NC	6.6E-04	N/A	NC
				Dichloroethane, 1,2-	0.013	N/A	N/A	N/A	NC	1.7E-04	9.1E-02	1.5E-05
				Dichloroethene, 1,1-	0.018	N/A	N/A	N/A	NC	2.3E-04	6.0E-01	1.4E-04
				Dichloroethene, 1,2- (cis)	0.41	N/A	N/A	N/A	NC	5.1E-03	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	N/A	N/A	N/A	NC	4.9E-05	N/A	NC
				Iron	5.1	N/A	N/A	N/A	NC	6.4E-02	N/A	NC
				Manganese	2.9	N/A	N/A	N/A	NC	3.6E-02	N/A	NC
				Methyl tert butyl ether	0.016	N/A	N/A	N/A	NC	2.0E-04	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	N/A	N/A	N/A	NC	1.9E-04	2.0E-01	3.8E-05
				Tetrachloroethene	0.11	N/A	N/A	N/A	NC	1.4E-03	5.2E-02	7.1E-05
				Thallium	0.0073	N/A	N/A	N/A	NC	9.1E-05	N/A	NC
				Trichloroethane, 1,1,1-	0.072	N/A	N/A	N/A	NC	9.0E-04	N/A	NC
				Trichloroethylene	0.33	N/A	N/A	N/A	NC	4.1E-03	4.0E-01	1.6E-03
				Vanadium	0.0040	N/A	N/A	N/A	NC	5.0E-05	N/A	NC
				Vinyl chloride	0.031	N/A	N/A	N/A	NC	3.9E-04	7.5E-01	3.0E-04
				(Total)					NC			2.4E-03
			Dermal and Inhalation	Aluminum	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Antimony	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Arsenic	N/A	N/A	N/A	NC	N/A	1.5E+00		NC
				Barium	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Benzene	N/A	N/A	N/A	NC	N/A	5.5E-02		1.5E-05
				Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	NC	N/A	1.1E+00		7.1E-05
				Bromodichloromethane	N/A	N/A	N/A	NC	N/A	6.2E-02		1.9E-07
				Carbon tetrachloride	N/A	N/A	N/A	NC	N/A	1.3E-01		3.3E-06
				Chlorobenzene	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Chloroethane	N/A	N/A	N/A	NC	N/A	2.9E-03		5.6E-07
				Chloroform	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Chromium	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Cobalt	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Dichlorobenzene, 1,4-	N/A	N/A	N/A	NC	N/A	2.4E-02		2.5E-06
				Dichloroethane, 1,1-	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Dichloroethane, 1,2-	N/A	N/A	N/A	NC	N/A	9.1E-02		1.5E-05
				Dichloroethene, 1,1-	N/A	N/A	N/A	NC	N/A	6.0E-01		1.4E-04
				Dichloroethene, 1,2- (cis)	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	N/A	N/A	N/A	NC	N/A	N/A	N/A	NC

TABLE 7.5a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 1 location	Dermal and Inhalation	Iron	EPC (mg/L)	N/A	N/A	N/A	NC	N/A	N/A	NC
				Manganese		N/A	N/A	N/A	NC	N/A	N/A	NC
				Methyl tert butyl ether		N/A	N/A	N/A	NC	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-Tetrachloroethene		N/A	N/A	N/A	NC	N/A	2.0E-01	3.8E-05
				Thallium		N/A	N/A	N/A	NC	N/A	5.2E-02	7.1E-05
				Trichloroethane, 1,1,1-Trichloroethene		N/A	N/A	N/A	NC	N/A	N/A	NC
				Vanadium		N/A	N/A	N/A	NC	N/A	4.0E-01	1.6E-03
				Vinyl chloride		N/A	N/A	N/A	NC	N/A	7.5E-01	3.0E-04
				(Total)					NC			2.3E-03
Landfill Gas	Air	Any Exposure Unit 1 location	Inhalation	Benzene	EPC (mg/m ³)	0.000718	N/A	1.7E-03	NF	NC	6.1E-04	1.7E-05
				Vinyl chloride		0.0007872	N/A	2.9E-02	0.1	NC	6.7E-05	1.0E-06
				(Total)					NC			1.8E-05
Total Hazard Index Across All Exposure Routes/Pathways										N/A	Total Cancer Risk	
											4.7E-03	

TABLE 7.5b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	N/A	3.0E-01	N/A	NC	2.3E-02	N/A	NC
				Manganese	254	N/A	2.0E-02	N/A	NC	2.1E-04	N/A	NC
			Dermal	Thallium	0.77	N/A	7.0E-05	N/A	NC	6.4E-07	N/A	NC
				Vanadium	76	N/A	7.0E-03	N/A	NC	6.4E-05	N/A	NC
Surface Soil	Air	Any Exposure Unit 2 location	Inhalation	(Total)					NC			
				Iron	27,800	N/A	NF	NF	NC	1.0E-08	N/A	NC
				Manganese	254	N/A	1.4E-05	5.0E-05	NC	9.3E-11	N/A	NC
				Thallium	0.77	N/A	NF	NF	NC	2.8E-13	N/A	NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	(Total)		EPC (mg/L)						
				Aluminum	1.9	N/A	N/A	N/A	NC	2.4E-02	N/A	NC
				Antimony	0.0062	N/A	N/A	N/A	NC	7.8E-05	N/A	NC
				Arsenic	0.0050	N/A	N/A	N/A	NC	6.3E-05	1.5E+00	9.4E-05
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Barium	0.27	N/A	N/A	N/A	NC	3.4E-03	N/A	NC
				Benzene	0.021	N/A	N/A	N/A	NC	2.7E-04	5.5E-02	1.5E-05
				Bis(2-ethylhexyl)phthalate	0.0051	N/A	N/A	N/A	NC	6.4E-05	1.1E+00	7.1E-05
				Bromodichloromethane	0.00025	N/A	N/A	N/A	NC	3.1E-06	6.2E-02	1.9E-07
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Carbon tetrachloride	0.0020	N/A	N/A	N/A	NC	2.5E-05	1.3E-01	3.3E-06
				Chlorobenzene	0.0076	N/A	N/A	N/A	NC	9.5E-05	N/A	NC
				Chloroethane	0.015	N/A	N/A	N/A	NC	1.9E-04	2.9E-03	5.6E-07
				Chloroform	0.012	N/A	N/A	N/A	NC	1.5E-04	N/A	NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Chromium	0.0078	N/A	N/A	N/A	NC	9.7E-05	N/A	NC
				Cobalt	0.032	N/A	N/A	N/A	NC	4.0E-04	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	N/A	N/A	N/A	NC	1.0E-04	2.4E-02	2.5E-06
				Dichloroethane, 1,1-	0.053	N/A	N/A	N/A	NC	6.6E-04	N/A	NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Dichloroethane, 1,2-	0.013	N/A	N/A	N/A	NC	1.7E-04	9.1E-02	1.5E-05
				Dichloroethene, 1,1-	0.018	N/A	N/A	N/A	NC	2.3E-04	6.0E-01	1.4E-04
				Dichloroethene, 1,2- (cis)	0.41	N/A	N/A	N/A	NC	5.1E-03	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	N/A	N/A	N/A	NC	4.9E-05	N/A	NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Iron	5.1	N/A	N/A	N/A	NC	6.4E-02	N/A	NC
				Manganese	2.9	N/A	N/A	N/A	NC	3.6E-02	N/A	NC
				Methyl tert butyl ether	0.016	N/A	N/A	N/A	NC	2.0E-04	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	N/A	N/A	N/A	NC	1.9E-04	2.0E-01	3.8E-05

TABLE 7.5b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 2 location	Ingestion	Tetrachloroethene	0.11	N/A	N/A	N/A	NC	1.4E-03	5.2E-02	7.1E-05
				Thallium	0.0073	N/A	N/A	N/A	NC	9.1E-05	N/A	NC
				Trichloroethane, 1,1,1-	0.072	N/A	N/A	N/A	NC	9.0E-04	N/A	NC
				Trichloroethene	0.33	N/A	N/A	N/A	NC	4.1E-03	4.0E-01	1.6E-03
				Vanadium	0.0040	N/A	N/A	N/A	NC	5.0E-05	N/A	NC
				Vinyl chloride	0.031	N/A	N/A	N/A	NC	3.9E-04	7.5E-01	3.0E-04
				(Total)					NC			2.4E-03
			Dermal and Inhalation	Aluminum	1.9	N/A	N/A	N/A	NC	N/A	N/A	NC
				Antimony	0.0062	N/A	N/A	N/A	NC	N/A	N/A	NC
				Arsenic	0.0050	N/A	N/A	N/A	NC	N/A	1.5E+00	NC
				Barium	0.27	N/A	N/A	N/A	NC	N/A	N/A	NC
				Benzene	0.021	N/A	N/A	N/A	NC	N/A	5.5E-02	1.5E-05
				Bis(2-ethylhexyl)phthalate	0.0051	N/A	N/A	N/A	NC	N/A	1.1E+00	7.1E-05
				Bromodichloromethane	0.00025	N/A	N/A	N/A	NC	N/A	6.2E-02	1.9E-07
				Carbon tetrachloride	0.0020	N/A	N/A	N/A	NC	N/A	1.3E-01	3.3E-06
				Chlorobenzene	0.0076	N/A	N/A	N/A	NC	N/A	N/A	NC
				Chloroethane	0.015	N/A	N/A	N/A	NC	N/A	2.9E-03	5.6E-07
				Chloroform	0.012	N/A	N/A	N/A	NC	N/A	N/A	NC
				Chromium	0.0078	N/A	N/A	N/A	NC	N/A	N/A	NC
				Cobalt	0.032	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	N/A	N/A	N/A	NC	N/A	2.4E-02	2.5E-06
				Dichloroethane, 1,1-	0.053	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichloroethane, 1,2-	0.013	N/A	N/A	N/A	NC	N/A	9.1E-02	1.5E-05
				Dichloroethene, 1,1-	0.018	N/A	N/A	N/A	NC	N/A	6.0E-01	1.4E-04
				Dichloroethene, 1,2- (cis)	0.41	N/A	N/A	N/A	NC	N/A	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	N/A	N/A	N/A	NC	N/A	N/A	NC
				Iron	5.1	N/A	N/A	N/A	NC	N/A	N/A	NC
				Manganese	2.9	N/A	N/A	N/A	NC	N/A	N/A	NC
				Methyl tert butyl ether	0.016	N/A	N/A	N/A	NC	N/A	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	N/A	N/A	N/A	NC	N/A	2.0E-01	3.8E-05
				Tetrachloroethene	0.11	N/A	N/A	N/A	NC	N/A	5.2E-02	7.1E-05
				Thallium	0.0073	N/A	N/A	N/A	NC	N/A	N/A	NC

TABLE 7.5b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Chronic Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any Exposure Unit 2 location	Dermal and Inhalation	Trichloroethane, 1,1,1-Trichloroethene Vanadium Vinyl chloride	EPC (mg/L) 0.07170 0.3263 0.004 0.03 (Total)	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A NC NC NC NC NC	N/A N/A N/A N/A N/A N/A	N/A 4.0E-01 N/A 7.5E-01	NC 1.6E-03 NC 3.0E-04 2.3E-03	
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene Vinyl chloride	EPC (mg/m ³) 0.000718 0.0007872 (Total)	N/A N/A	1.7E-03 2.9E-02	NF 0.1	NC NC NC	6.1E-04 6.7E-05	2.7E-02 1.5E-02	1.7E-05 1.0E-06 1.8E-05
Total Hazard Index Across All Exposure Routes / Pathways										N/A	Total Cancer Risk	4.7E-03

TABLE 7.6a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Ingestion	Aldrin	0.0065	1.2E-08	3.0E-05	N/A	4.1E-04	5.9E-11	1.7E+01	1.0E-09
				Aluminum	47,785	9.1E-02	1.0E+00	N/A	9.1E-02	4.3E-04	N/A	NC
				Antimony	2.3	4.3E-06	4.0E-04	N/A	1.1E-02	2.1E-08	N/A	NC
				Aroclor-1242	0.12	2.2E-07	5.0E-05	N/A	4.5E-03	1.1E-09	2.0E+00	2.1E-09
				Aroclor-1248	0.30	5.7E-07	5.0E-05	N/A	1.1E-02	2.7E-09	2.0E+00	5.5E-09
				Aroclor-1254	0.28	5.3E-07	5.0E-05	N/A	1.1E-02	2.5E-09	2.0E+00	5.1E-09
				Arsenic	3.1	6.0E-06	3.0E-04	N/A	2.0E-02	2.8E-08	1.5E+00	4.3E-08
				Barium	1,668	3.2E-03	7.0E-02	N/A	4.5E-02	1.5E-05	N/A	NC
				Benzo(a)anthracene	0.37	7.1E-07	NF	N/A	NC	3.4E-09	7.3E-01	2.5E-09
				Benzo(a)pyrene	0.58	1.1E-06	NF	N/A	NC	5.2E-09	7.3E+00	3.8E-08
				Benzo(b)fluoranthene	0.59	1.1E-06	NF	N/A	NC	5.3E-09	7.3E-01	3.9E-09
				Benzo(k)fluoranthene	0.41	7.8E-07	NF	N/A	NC	3.7E-09	7.3E-02	2.7E-10
				Bis(2-ethylhexyl)phthalate	11	2.1E-05	2.0E-02	N/A	1.0E-03	1.0E-07	1.4E-02	1.4E-09
				Cadmium	9.1	1.7E-05	1.0E-03	N/A	1.7E-02	8.3E-08	N/A	NC
				Chromium	111	2.1E-04	2.0E-02	N/A	1.1E-02	1.0E-06	N/A	NC
				Chrysene	0.43	8.2E-07	NF	N/A	NC	3.9E-09	7.3E-03	2.9E-11
				Copper	116	2.2E-04	4.0E-02	N/A	5.5E-03	1.1E-06	N/A	NC
				Cyanide, total	3.5	6.6E-06	2.0E-02	N/A	3.3E-04	3.1E-08	N/A	NC
				Iron	45,866	8.8E-02	3.0E-01	N/A	2.9E-01	4.2E-04	N/A	NC
				Lead	98	1.9E-04	NF	N/A	NC	8.9E-07	N/A	NC
				Manganese	584	1.1E-03	1.4E-01	N/A	8.0E-03	5.3E-06	N/A	NC
				Mercury	7.3	1.4E-05	3.0E-04	N/A	4.6E-02	6.6E-08	N/A	NC
				Naphthalene	1.5	2.8E-06	2.0E-02	N/A	1.4E-04	1.3E-08	N/A	NC
				Nickel	53	1.0E-04	2.0E-02	N/A	5.1E-03	4.8E-07	N/A	NC
				Tetrachloroethene	0.080	1.5E-07	1.0E-01	N/A	1.5E-06	7.3E-10	5.2E-02	3.8E-11
				Thallium	0.91	1.7E-06	7.0E-05	N/A	2.5E-02	8.2E-09	N/A	NC
				Toxaphene	0.58	1.1E-06	NF	N/A	NC	5.2E-09	1.1E+00	5.8E-09
				Trichloroethene	0.10	1.9E-07	3.0E-04	N/A	6.2E-04	8.9E-10	4.0E-01	3.6E-10
				Vanadium	147	2.8E-04	7.0E-03	N/A	4.0E-02	1.3E-06	N/A	NC
				(Total)					6.5E-01			1.1E-07
			Dermal	Aldrin	0.0065	1.6E-09	3.0E-05	N/A	5.3E-05	7.5E-12	1.7E+01	1.3E-10
				Aluminum	47,785	1.2E-03	4.0E-02	N/A	2.9E-02	5.6E-06	N/A	NC
				Antimony	2.3	5.5E-08	4.0E-06	N/A	1.4E-02	2.6E-10	N/A	NC
				Aroclor-1242	0.12	2.9E-08	4.3E-05	N/A	6.7E-04	1.4E-10	2.4E+00	3.2E-10
				Aroclor-1248	0.30	7.3E-08	4.3E-05	N/A	1.7E-03	3.5E-10	2.4E+00	8.2E-10
				Aroclor-1254	0.28	6.8E-08	4.3E-05	N/A	1.6E-03	3.2E-10	2.4E+00	7.6E-10
				Arsenic	3.1	7.6E-08	2.9E-04	N/A	2.7E-04	3.6E-10	1.6E+00	5.7E-10
				Barium	1,668	4.1E-05	3.5E-03	N/A	1.2E-02	1.9E-07	N/A	NC
				Benzo(a)anthracene	0.37	9.1E-08	NF	N/A	NC	4.3E-10	1.5E+00	6.3E-10
				Benzo(a)pyrene	0.58	1.4E-07	NF	N/A	NC	6.7E-10	1.5E+01	9.8E-09
				Benzo(b)fluoranthene	0.59	1.4E-07	NF	N/A	NC	6.8E-10	1.5E+00	1.0E-09

TABLE 7.6a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Dermal	Benzo(k)fluoranthene	0.41	1.0E-07	NF	N/A	NC	4.8E-10	1.5E-01	7.0E-11
				Bis(2-ethylhexyl)phthalate	11	2.7E-06	1.0E-02	N/A	2.7E-04	1.3E-08	2.8E-02	3.6E-10
				Cadmium	9.1	2.2E-07	4.4E-05	N/A	5.1E-03	1.1E-09	N/A	NC
				Chromium	111	2.7E-06	2.6E-04	N/A	1.0E-02	1.3E-08	N/A	NC
				Chrysene	0.43	1.1E-07	NF	N/A	NC	5.0E-10	1.5E-02	7.3E-12
				Copper	116	2.8E-06	2.2E-02	N/A	1.3E-04	1.4E-08	N/A	NC
				Cyanide, total	3.5	8.5E-08	2.0E-02	N/A	4.2E-06	4.0E-10	N/A	NC
				Iron	45,866	1.1E-03	2.6E-02	N/A	4.4E-02	5.3E-06	N/A	NC
				Lead	98	2.4E-06	NF	N/A	NC	1.1E-08	N/A	NC
				Manganese	584	1.4E-05	5.6E-03	N/A	2.6E-03	6.8E-08	N/A	NC
				Mercury	7.3	1.8E-07	3.0E-05	N/A	5.9E-03	8.5E-10	N/A	NC
				Naphthalene	1.5	3.6E-07	2.0E-02	N/A	1.8E-05	1.7E-09	N/A	NC
				Nickel	53	1.3E-06	1.0E-03	N/A	1.3E-03	6.2E-09	N/A	NC
				Tetrachloroethene	0.080	2.0E-08	1.0E-01	N/A	2.0E-07	9.4E-11	5.2E-02	4.9E-12
				Thallium	0.91	2.2E-08	1.4E-05	N/A	1.6E-03	1.1E-10	N/A	NC
				Toxaphene	0.58	1.4E-07	NF	N/A	NC	6.7E-10	2.2E+00	1.5E-09
				Trichloroethene	0.10	2.4E-08	2.8E-04	N/A	8.5E-05	1.1E-10	4.2E-01	4.8E-11
				Vanadium	147	3.6E-06	1.8E-04	N/A	2.0E-02	1.7E-08	N/A	NC
				(Total)					1.5E-01			1.6E-08
Air	Any Exposure Unit 1 location	Inhalation		Aldrin	0.0065	1.9E-09	NF	NF	NC	9.3E-12	1.7E+01	1.6E-10
				Aluminum	47,785	8.0E-08	1.0E-03	NF	8.0E-05	3.8E-10	N/A	NC
				Antimony	2.3	3.8E-12	NF	NF	NC	1.8E-14	N/A	NC
				Aroclor-1242	0.12	6.3E-08	NF	NF	NC	3.0E-10	4.0E-01	1.2E-10
				Aroclor-1248	0.30	1.6E-07	NF	NF	NC	7.7E-10	4.0E-01	3.1E-10
				Aroclor-1254	0.28	1.5E-07	NF	NF	NC	7.1E-10	4.0E-01	2.9E-10
				Arsenic	3.1	5.2E-12	NF	NF	NC	2.5E-14	1.5E+01	3.8E-13
				Barium	1,668	2.8E-09	1.4E-03	5.0E-03	2.0E-06	1.3E-11	N/A	NC
				Benzo(a)anthracene	0.37	1.2E-08	NF	NF	NC	5.5E-11	3.1E-01	1.7E-11
				Benzo(a)pyrene	0.58	7.0E-09	NF	NF	NC	3.3E-11	3.1E+00	1.0E-10
				Benzo(b)fluoranthene	0.59	3.9E-09	NF	NF	NC	1.8E-11	3.1E-01	5.7E-12
				Benzo(k)fluoranthene	0.41	3.0E-09	NF	NF	NC	1.4E-11	3.1E-02	4.5E-13
				Bis(2-ethylhexyl)phthalate	11	1.7E-07	NF	NF	NC	8.3E-10	1.4E-02	1.2E-11
				Cadmium	9.1	1.5E-11	NF	NF	NC	7.3E-14	6.3E+00	4.6E-13
				Chromium	111	1.9E-10	2.9E-05	1.0E-04	6.5E-06	8.9E-13	4.2E+01	3.7E-11
				Chrysene	0.43	4.6E-08	NF	NF	NC	2.2E-10	3.1E-03	6.8E-13
				Copper	116	1.9E-10	NF	NF	NC	9.3E-13	N/A	NC
				Cyanide, total	3.5	5.8E-12	NF	NF	NC	2.8E-14	N/A	NC
				Iron	45,866	7.7E-08	NF	NF	NC	3.7E-10	N/A	NC
				Lead	98	1.6E-10	NF	NF	NC	7.8E-13	N/A	NC
				Manganese	584	9.8E-10	1.4E-05	5.0E-05	6.9E-05	4.7E-12	N/A	NC
				Mercury	7.3	6.5E-05	8.6E-05	3.0E-04	7.6E-01	3.1E-07	N/A	NC

TABLE 7.6a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Air	Any Exposure Unit 1 location	Inhalation	Naphthalene	1.5	7.7E-06	8.6E-04	3.0E-03	8.9E-03	3.6E-08	N/A	NC
				Nickel	53	8.9E-11	NF	NF	NC	4.3E-13	N/A	NC
				Tetrachloroethene	0.080	7.3E-06	1.4E-01	NF	5.2E-05	3.5E-08	1.0E-02	3.5E-10
				Thallium	0.91	1.5E-12	NF	NF	NC	7.2E-15	N/A	NC
				Toxaphene	0.58	2.4E-08	NF	NF	NC	1.1E-10	1.1E+00	1.3E-10
				Trichloroethene	0.10	1.1E-05	1.0E-02	NF	1.1E-03	5.2E-08	4.0E-01	2.1E-08
				Vanadium	147	2.5E-10	NF	NF	NC	1.2E-12	N/A	NC
				(Total)					7.7E-01			1.5E-09
Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 location	Ingestion	Aroclor 1242	4.0	7.6E-06	5.0E-05 (1)	N/A	1.5E-01	3.6E-08	2.0E+00	7.3E-08
				Aroclor 1248	0.31	5.8E-07	5.0E-05 (1)	N/A	1.2E-02	2.8E-09	2.0E+00	5.6E-09
				Aroclor 1254	0.31	5.8E-07	5.0E-05 (1)	N/A	1.2E-02	2.8E-09	2.0E+00	5.6E-09
				Arsenic	4.1	7.9E-06	3.0E-04	N/A	2.6E-02	3.8E-08	1.5E+00	5.7E-08
				Benzo(a)anthracene	0.98	1.9E-06	NF	N/A	NC	8.9E-09	7.3E-01	6.5E-09
				Benzo(a)pyrene	0.55	1.0E-06	NF	N/A	NC	5.0E-09	7.3E+00	3.6E-08
				Benzo(b)fluoranthene	0.84	1.6E-06	NF	N/A	NC	7.6E-09	7.3E-01	5.5E-09
				Benzo(k)fluoranthene	0.73	1.4E-06	NF	N/A	NC	6.6E-09	7.3E-02	4.8E-10
				Chromium	84	1.6E-04	2.0E-02 (1)	N/A	8.0E-03	7.6E-07	N/A	NC
				Chrysene	0.87	1.7E-06	NF	N/A	NC	7.9E-09	7.3E-03	5.8E-11
				Dichloroethene, 1,1-	0.27	5.2E-07	9.0E-03	N/A	5.7E-05	2.5E-09	6.0E-01	1.5E-09
				Dichloroethene, cis-1,2-	0.29	5.5E-07	1.0E-01 (1)	N/A	5.5E-06	2.6E-09	N/A	NC
				Indeno(1,2,3-cd)pyrene	0.64	1.2E-06	NF	N/A	NC	5.8E-09	7.3E-01	4.2E-09
				Iron	43,820	8.4E-02	3.0E-01	N/A	2.8E-01	4.0E-04	N/A	NC
				Tetrachloroethene	124	2.4E-04	1.0E-01 (1)	N/A	2.4E-03	1.1E-06	5.2E-02	5.9E-08
				Thallium	12	2.2E-05	7.0E-05	N/A	3.2E-01	1.1E-07	N/A	NC
				Toluene	7.6	1.4E-05	2.0E-01	N/A	7.2E-05	6.9E-08	N/A	NC
				Trichloroethene	50	9.5E-05	3.0E-04	N/A	3.2E-01	4.5E-07	4.0E-01	1.8E-07
				(Total)					1.1E+00			4.3E-07
			Dermal	Aroclor 1242	4.0	9.8E-07	4.3E-05 (1)	N/A	2.3E-02	4.7E-09	2.4E+00	1.1E-08
				Aroclor 1248	0.31	7.5E-08	4.3E-05 (1)	N/A	1.8E-03	3.6E-10	2.4E+00	8.4E-10
				Aroclor 1254	0.31	7.5E-08	4.3E-05 (1)	N/A	1.8E-03	3.6E-10	2.4E+00	8.4E-10
				Arsenic	4.1	1.0E-07	2.9E-04	N/A	3.6E-04	4.8E-10	1.6E+00	7.6E-10
				Benzo(a)anthracene	0.98	2.4E-07	NF	N/A	NC	1.1E-09	1.5E+00	1.7E-09
				Benzo(a)pyrene	0.55	1.3E-07	NF	N/A	NC	6.4E-10	1.5E+01	9.4E-09
				Benzo(b)fluoranthene	0.84	2.0E-07	NF	N/A	NC	9.7E-10	1.5E+00	1.4E-09
				Benzo(k)fluoranthene	0.73	1.8E-07	NF	N/A	NC	8.5E-10	1.5E-01	1.2E-10
				Chromium	84	2.0E-06	2.6E-04 (1)	N/A	7.9E-03	9.8E-09	N/A	NC
				Chrysene	0.87	2.1E-07	NF	N/A	NC	1.0E-09	1.5E-02	1.5E-11
				Dichloroethene, 1,1-	0.27	6.6E-08	9.0E-03	N/A	7.3E-06	3.1E-10	6.0E-01	1.9E-10
				Dichloroethene, cis-1,2-	0.29	7.0E-08	8.0E-02 (1)	N/A	8.7E-07	3.3E-10	N/A	NC
				Indeno(1,2,3-cd)pyrene	0.64	1.6E-07	NF	N/A	NC	7.5E-10	1.5E+00	1.1E-09
				Iron	43,820	1.1E-03	2.6E-02	N/A	4.2E-02	5.1E-06	N/A	NC

TABLE 7.6a RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁽¹⁾	Cancer Risk
Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 location	Dermal	Tetrachloroethene Thallium Toluene Trichloroethene	124 12 7.6 50	3.0E-05 2.9E-07 1.9E-06 1.2E-05	1.0E-01 (1) 1.4E-05 2.0E-01 2.8E-04	N/A N/A N/A N/A	3.0E-04 2.0E-02 9.3E-06 4.3E-02	1.4E-07 1.4E-09 8.8E-09 5.8E-08	5.2E-02 N/A N/A 4.2E-01	7.5E-09 NC NC 2.4E-08
				(Total)					1.4E-01			5.9E-08
Subsurface Soil	Air	Any Exposure Unit 1 location	Inhalation	Aroclor 1242 Aroclor 1248 Aroclor 1254 Arsenic Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chromium Chrysene Dichloroethene, 1,1-Dichloroethene, cis-1,2-Indeno(1,2,3-cd)pyrene Iron Tetrachloroethene Thallium Toluene Trichloroethene	4.0 0.31 0.31 4.1 0.98 0.55 0.84 0.73 84 0.87 0.27 0.29 0.64 43,820 124 12 7.6 50	1.8E-17 1.4E-18 1.4E-18 7.0E-12 2.6E-19 5.7E-20 4.7E-20 4.6E-20 1.4E-10 8.0E-19 4.7E-16 2.2E-16 2.8E-20 7.4E-08 9.7E-14 2.0E-11 4.8E-15 4.8E-14	NF NF NF NF NF NF NF NF 2.9E-05 NF NF NF NF NF 1.4E-01 NF NF NF NF	NF NF NF NF NF NF NF NF 1.0E-04 NF NF NF NF NF 7.0E-13 4.6E-16	NC NC NC NC NC NC NC NC 4.9E-06 NC NC NC NC NC 3.5E-10 4.6E-16	8.8E-20 6.7E-21 6.7E-21 3.3E-14 1.2E-21 2.7E-22 2.2E-22 2.2E-22 6.7E-13 3.8E-21 2.3E-18 1.1E-18 1.3E-22 3.5E-10 9.3E-14 2.3E-17 2.3E-16	4.0E-01 4.0E-01 4.0E-01 1.5E+01 3.1E-01 3.1E+00 3.1E-01 3.1E-02 4.2E+01 3.1E-03 1.8E-01 N/A 3.1E-01 N/A N/A 4.0E-01	3.5E-20 2.7E-21 2.7E-21 5.0E-13 3.9E-22 8.4E-22 6.9E-23 6.8E-24 2.8E-11 1.2E-23 4.0E-19 N/A 4.2E-23 N/A N/A 4.6E-18
				(Total)								2.9E-11
Landfill Gas	Air	Any Exposure Unit 1 location	Inhalation	Benzene Vinyl chloride	EPC (mg/m³) 0.000718 0.0007872	1.4E-03 1.5E-04	1.7E-03 2.9E-02	NF 1.0E-01	8.2E-01 5.4E-03 8.3E-01	6.7E-06 7.3E-07	2.7E-02 1.5E-02	1.8E-07 1.1E-08 1.9E-07
					Total Hazard Index Across All Exposure Routes/Pathways				3.7E+00	Total Cancer Risk		8.1E-07

(1) Indicates that the RfD or RfC is a subchronic value. All others are chronic values.

TABLE 7.6b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Ingestion	Iron	27,800	5.3E-02	3.0E-01	N/A	1.8E-01	2.5E-04	N/A	NC
				Manganese	254	4.8E-04	1.4E-01 (1)	N/A	3.5E-03	2.3E-06	N/A	NC
				Thallium	0.77	1.5E-06	7.0E-05	N/A	2.1E-02	7.0E-09	N/A	NC
			Dermal	Vanadium	76	1.5E-04	7.0E-03	N/A	2.1E-02	6.9E-07	N/A	NC
				(Total)					2.2E-01			NC
		Air	Inhalation	Iron	27,800	6.8E-04	2.6E-02	N/A	2.7E-02	3.2E-06	N/A	NC
				Manganese	254	6.2E-06	5.6E-03 (1)	N/A	1.1E-03	3.0E-08	N/A	NC
				Thallium	0.77	1.9E-08	1.4E-05	N/A	1.3E-03	9.0E-11	N/A	NC
			Dermal	Vanadium	76	1.9E-06	1.8E-04	N/A	1.0E-02	8.9E-09	N/A	NC
				(Total)					3.9E-02			NC
				Iron	27,800	4.7E-08	NF	NF	NC	2.2E-10	N/A	NC
				Manganese	254	4.3E-10	1.4E-05	5.0E-05	3.0E-05	2.0E-12	N/A	NC
				Thallium	0.77	1.3E-12	NF	NF	NC	6.2E-15	N/A	NC
				Vanadium	76	1.3E-10	NF	NF	NC	6.1E-13	N/A	NC
				(Total)					3.0E-05			NC
Subsurface Soil	Subsurface Soil	Any Exposure Unit 2 location	Ingestion	Arsenic	6.6	1.3E-05	3.0E-04	N/A	4.2E-02	6.0E-08	1.5E+00	9.0E-08
				(Total)					4.2E-02			9.0E-08
			Dermal	Arsenic	6.6	1.6E-07	2.9E-04	N/A	5.7E-04	7.7E-10	1.6E+00	1.2E-09
		Air	Inhalation	Arsenic	6.6	1.1E-11	NF	NF	NC	5.3E-14	1.5E+01	7.9E-13
				(Total)					NC			7.9E-13
Sediment	Sediment	Any Exposure Unit 2 location	Ingestion	Aluminum	17,251	3.3E-03	1.0E+00	N/A	3.3E-03	1.6E-05	N/A	NC
				Antimony	2.9	5.5E-07	4.0E-04	N/A	1.4E-03	2.6E-09	N/A	NC
				Aroclor-1248	0.035	6.7E-09	5.0E-05	N/A	1.3E-04	3.2E-11	2.0E+00	6.4E-11
				Aroclor-1254	0.033	6.3E-09	5.0E-05	N/A	1.3E-04	3.0E-11	2.0E+00	6.0E-11
				Arsenic	2.3	4.4E-07	3.0E-04	N/A	1.5E-03	2.1E-09	1.5E+00	3.1E-09
				Barium	688	1.3E-04	7.0E-02	N/A	1.9E-03	6.3E-07	N/A	NC
				Benz(a)anthracene	0.15	2.9E-08	NF	N/A	NC	1.4E-10	7.3E-01	9.9E-11
				Benz(a)pyrene	0.16	3.1E-08	NF	N/A	NC	1.5E-10	7.3E+00	1.1E-09
				Benz(b)fluoranthene	0.16	3.1E-08	NF	N/A	NC	1.5E-10	7.3E-01	1.1E-10
				Benz(k)fluoranthene	0.14	2.7E-08	NF	N/A	NC	1.3E-10	7.3E-02	9.3E-12
				Chromium	43	8.2E-06	2.0E-02	N/A	4.1E-04	3.9E-08	N/A	NC
				Chrysene	0.17	3.2E-08	NF	N/A	NC	1.5E-10	7.3E-03	1.1E-12
				Iron	23,760	4.5E-03	3.0E-01	N/A	1.5E-02	2.2E-05	N/A	NC
				Manganese	759	1.4E-04	1.4E-01	N/A	1.0E-03	6.9E-07	N/A	NC
				Mercury	0.41	7.8E-08	3.0E-04	N/A	2.6E-04	3.7E-10	N/A	NC
				Thallium	3.2	6.1E-07	7.0E-05	N/A	8.7E-03	2.9E-09	N/A	NC
				Vanadium	61	1.2E-05	7.0E-03	N/A	1.7E-03	5.5E-08	N/A	NC
				(Total)					3.5E-02			4.5E-09

TABLE 7.6b RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	Medium EPC Value (mg/kg)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁽¹⁾	Cancer Risk	
Sediment	Sediment	Any Exposure Unit 2 location	Dermal	Aluminum	17,251	4.2E-05	4.0E-02	N/A	1.1E-03	2.0E-07	N/A	NC	
				Antimony	2.9	7.1E-09	4.0E-06	N/A	1.8E-03	3.4E-11	N/A	NC	
				Aroclor-1248	0.035	8.6E-10	4.3E-05	N/A	2.0E-05	4.1E-12	2.4E+00	9.6E-12	
				Aroclor-1254	0.033	8.1E-10	4.3E-05	N/A	1.9E-05	3.8E-12	2.4E+00	9.0E-12	
				Arsenic	2.3	5.6E-09	2.9E-04	N/A	2.0E-05	2.7E-11	1.6E+00	4.2E-11	
				Barium	688	1.7E-06	3.5E-03	N/A	4.8E-04	8.0E-09	N/A	NC	
				Benzo(a)anthracene	0.15	3.7E-09	NF	N/A	NC	1.7E-11	1.5E+00	2.6E-11	
				Benzo(a)pyrene	0.16	3.9E-09	NF	N/A	NC	1.9E-11	1.5E+01	2.7E-10	
				Benzo(b)fluoranthene	0.16	3.9E-09	NF	N/A	NC	1.9E-11	1.5E+00	2.7E-11	
				Benzo(k)fluoranthene	0.14	3.4E-09	NF	N/A	NC	1.6E-11	1.5E-01	2.4E-12	
				Chromium	43	1.1E-07	2.6E-04	N/A	4.0E-04	5.0E-10	N/A	NC	
				Chrysene	0.17	4.2E-09	NF	N/A	NC	2.0E-11	1.5E-02	2.9E-13	
				Iron	23,760	5.8E-05	2.6E-02	N/A	2.3E-03	2.8E-07	N/A	NC	
				Manganese	759	1.9E-06	5.6E-03	N/A	3.3E-04	8.8E-09	N/A	NC	
				Mercury	0.41	1.0E-09	3.0E-05	N/A	3.3E-05	4.8E-12	N/A	NC	
				Thallium	3.2	7.8E-09	1.4E-05	N/A	5.6E-04	3.7E-11	N/A	NC	
				Vanadium	61	1.5E-07	1.8E-04	N/A	8.2E-04	7.1E-10	N/A	NC	
				(Total)					7.8E-03			3.9E-10	
	Air	Any Exposure Unit 2 location	Inhalation	Aluminum	17,251	2.9E-09	1.0E-03	NF	2.9E-06	1.4E-11	N/A	NC	
				Antimony	2.9	4.9E-13	NF	NF	NC	2.3E-15	N/A	NC	
				Aroclor-1248	0.035	1.9E-09	NF	NF	NC	9.0E-12	4.0E-01	3.6E-12	
				Aroclor-1254	0.033	1.8E-09	NF	NF	NC	8.4E-12	4.0E-01	3.4E-12	
				Arsenic	2.3	3.9E-13	NF	NF	NC	1.8E-15	1.5E+01	2.8E-14	
				Barium	688	1.2E-10	1.4E-03	5.0E-03	8.1E-08	5.5E-13	N/A	NC	
				Benzo(a)anthracene	0.15	4.7E-10	NF	NF	NC	2.2E-12	3.1E-01	6.9E-13	
				Benzo(a)pyrene	0.16	1.9E-10	NF	NF	NC	9.2E-13	3.1E+00	2.9E-12	
				Benzo(b)fluoranthene	0.16	1.1E-10	NF	NF	NC	5.0E-13	3.1E-01	1.6E-13	
				Benzo(k)fluoranthene	0.14	1.0E-10	NF	NF	NC	4.9E-13	3.1E-02	1.5E-14	
				Chromium	43	7.2E-12	2.9E-05	1.0E-04	2.5E-07	3.4E-14	4.2E+01	1.4E-12	
				Chrysene	0.17	1.8E-09	NF	NF	NC	8.7E-12	3.1E-03	2.7E-14	
				Iron	23,760	4.0E-09	NF	NF	NC	1.9E-11	N/A	NC	
				Manganese	759	1.3E-10	1.4E-05	5.0E-05	8.9E-06	6.1E-13	N/A	NC	
				Mercury	0.41	3.7E-07	8.6E-05	3.0E-04	4.3E-03	1.7E-09	N/A	NC	
				Thallium	3.2	5.4E-13	NF	NF	NC	2.6E-15	N/A	NC	
				Vanadium	61	1.0E-11	NF	NF	NC	4.9E-14	N/A	NC	
				(Total)					4.3E-03			1.2E-11	
Landfill Gas	Air	Any Exposure Unit 2 location	Inhalation	Benzene	EPC (mg/m ³)	0.000718	1.4E-03	1.7E-03	NF	8.2E-01	6.7E-06	2.7E-02	1.8E-07
				Vinyl chloride		0.0007872	1.5E-04	2.9E-02	0.1	5.4E-03	7.3E-07	1.5E-02	1.1E-08
				(Total)					8.3E-01			1.9E-07	
Total Hazard Index Across All Exposure Routes/Pathways										1.2E+00	Total Cancer Risk		2.9E-07

(1) Indicates that the RfD or RfC is a subchronic value. All others are chronic values.

TABLE 7.7 RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC Value (mg/L)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any EU-1 or EU-2 location	Ingestion	Aluminum	1.9	4.8E-05	1.0E+00	N/A	4.8E-05	1.7E-05	N/A	NC
				Antimony	0.0062	1.6E-07	4.0E-04	N/A	3.9E-04	5.5E-08	N/A	NC
				Arsenic	0.0050	1.3E-07	3.0E-04	N/A	4.2E-04	4.5E-08	1.5E+00	6.7E-08
				Barium	0.27	6.8E-06	7.0E-02	N/A	9.7E-05	2.4E-06	N/A	NC
				Benzene	0.021	5.4E-07	3.0E-03	N/A	1.8E-04	1.9E-07	5.5E-02	1.1E-08
				Bis(2-ethylhexyl)phthalate	0.0051	1.3E-07	NF	N/A	NC	4.6E-08	1.1E+00	5.0E-08
				Bromodichloromethane	0.00025	6.3E-09	2.0E-02	N/A	3.1E-07	2.2E-09	6.2E-02	1.4E-10
				Carbon tetrachloride	0.0020	5.0E-08	7.0E-04	N/A	7.2E-05	1.8E-08	1.3E-01	2.3E-09
				Chlorobenzene	0.0076	1.9E-07	2.0E-02	N/A	9.5E-06	6.8E-08	N/A	NC
				Chloroethane	0.015	3.8E-07	4.0E-01	N/A	9.6E-07	1.4E-07	2.9E-03	4.0E-10
				Chloroform	0.012	3.1E-07	1.0E-02	N/A	3.1E-05	1.1E-07	N/A	NC
				Chromium	0.0078	1.9E-07	3.0E-03	N/A	6.5E-05	7.0E-08	N/A	NC
				Cobalt	0.032	8.0E-07	2.0E-02	N/A	4.0E-05	2.9E-07	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	2.1E-07	3.0E-02	N/A	6.9E-06	7.4E-08	2.4E-02	1.8E-09
				Dichloroethane, 1,1-	0.053	1.3E-06	1.0E-01	N/A	1.3E-05	4.7E-07	N/A	NC
				Dichloroethane, 1,2-	0.013	3.4E-07	3.0E-02	N/A	1.1E-05	1.2E-07	9.1E-02	1.1E-08
				Dichloroethene, 1,1-	0.018	4.6E-07	9.0E-03	N/A	5.1E-05	1.6E-07	6.0E-01	9.8E-08
				Dichloroethene, 1,2- (cis)	0.41	1.0E-05	1.0E-02	N/A	1.0E-03	3.6E-06	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	9.8E-08	2.0E-02	N/A	4.9E-06	3.5E-08	N/A	NC
				Iron	5.1	1.3E-04	3.0E-01	N/A	4.3E-04	4.6E-05	N/A	NC
				Manganese	2.9	7.3E-05	2.0E-02	N/A	3.6E-03	2.6E-05	N/A	NC
				Methyl tert butyl ether	0.016	4.0E-07	3.0E-02	N/A	1.3E-05	1.4E-07	N/A	NC
				Tetrachloroethane, 1,1,2-	0.015	3.8E-07	6.0E-02	N/A	6.3E-06	1.3E-07	2.0E-01	2.7E-08
				Tetrachloroethene	0.11	2.7E-06	1.0E-02	N/A	2.7E-04	9.8E-07	5.2E-02	5.1E-08
				Thallium	0.0073	1.8E-07	7.0E-05	N/A	2.6E-03	6.5E-08	N/A	NC
				Trichloroethane, 1,1,1-	0.072	1.8E-06	2.8E-01	N/A	6.4E-06	6.4E-07	N/A	NC
				Trichloroethene	0.33	8.2E-06	3.0E-04	N/A	2.7E-02	2.9E-06	4.0E-01	1.2E-06
				Vanadium	0.0040	9.9E-08	7.0E-03	N/A	1.4E-05	3.5E-08	N/A	NC
				Vinyl chloride	0.031	7.9E-07	3.0E-03	N/A	2.6E-04	2.8E-07	7.5E-01	2.1E-07
				(Total)					3.7E-02			1.7E-06
			Dermal	Aluminum	1.9	2.4E-05	4.0E-02	N/A	6.0E-04	8.5E-06	N/A	NC
				Antimony	0.0062	7.8E-08	4.0E-06	N/A	1.9E-02	2.8E-08	N/A	NC
				Arsenic	0.0050	6.3E-08	2.9E-04	N/A	2.2E-04	2.2E-08	1.6E+00	3.5E-08
				Barium	0.27	3.4E-06	3.5E-03	N/A	9.7E-04	1.2E-06	N/A	NC
				Benzene	0.021	5.6E-06	2.7E-03	N/A	2.1E-03	2.0E-06	6.1E-02	1.2E-07
				Bis(2-ethylhexyl)phthalate	0.0051	1.3E-07	NF	N/A	NC	4.8E-08	1.1E+00	5.4E-08
				Bromodichloromethane	0.00025	1.8E-08	2.0E-02	N/A	9.3E-07	6.5E-09	6.3E-02	4.1E-10
				Carbon tetrachloride	0.0020	5.5E-07	6.0E-04	N/A	9.3E-04	2.0E-07	1.5E-01	3.0E-08
				Chlorobenzene	0.0076	3.9E-06	6.2E-03	N/A	6.3E-04	1.4E-06	N/A	NC
				Chloroethane	0.015	1.5E-06	3.2E-01	N/A	4.8E-06	5.5E-07	3.6E-03	2.0E-09
				Chloroform	0.012	1.4E-06	1.0E-02	N/A	1.4E-04	4.9E-07	N/A	NC
				Chromium	0.0078	9.7E-08	3.9E-05	N/A	2.5E-03	3.5E-08	N/A	NC
				Cobalt	0.032	4.0E-07	5.0E-03	N/A	8.0E-05	1.4E-07	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	6.4E-06	3.0E-02	N/A	2.1E-04	2.3E-06	2.4E-02	5.5E-08
				Dichloroethane, 1,1-	0.053	5.9E-06	8.0E-02	N/A	7.4E-05	2.1E-06	N/A	NC
				Dichloroethane, 1,2-	0.013	8.9E-07	3.0E-02	N/A	3.0E-05	3.2E-07	9.1E-02	2.9E-08
				Dichloroethene, 1,1-	0.018	3.7E-06	9.0E-03	N/A	4.1E-04	1.3E-06	6.0E-01	7.8E-07
				Dichloroethene, 1,2- (cis)	0.41	5.1E-05	8.0E-03	N/A	6.4E-03	1.8E-05	N/A	NC

TABLE 7.7 RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC Value (mg/L)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ⁻¹	Cancer Risk
Groundwater	Groundwater	Any EU-1 or EU-2 location	Dermal	Dichloroethene, 1,2- (trans)	0.0039	4.9E-07	1.6E-02	N/A	3.1E-05	1.7E-07	N/A	NC
				Iron	5.1	6.4E-05	2.6E-02	N/A	2.5E-03	2.3E-05	N/A	NC
				Manganese	2.9	3.6E-05	8.0E-04	N/A	4.5E-02	1.3E-05	N/A	NC
				Methyl tert butyl ether	0.016	6.0E-07	3.0E-02	N/A	2.0E-05	2.1E-07	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	1.7E-06	4.8E-02	N/A	3.5E-05	6.0E-07	2.5E-01	1.5E-07
				Tetrachloroethene	0.11	6.6E-05	1.0E-02	N/A	6.6E-03	2.3E-05	5.2E-02	1.2E-06
				Thallium	0.0073	9.1E-08	1.4E-05	N/A	6.5E-03	3.2E-08	N/A	NC
				Trichloroethane, 1,1,1-	0.072	1.5E-05	2.8E-01	N/A	5.5E-05	5.5E-06	N/A	NC
				Trichloroethene	0.33	6.5E-05	2.8E-04	N/A	2.3E-01	2.3E-05	4.2E-01	9.9E-06
				Vanadium	0.0040	4.9E-08	1.8E-04	N/A	2.7E-04	1.8E-08	N/A	NC
				Vinyl chloride	0.031	2.9E-06	2.6E-03	N/A	1.1E-03	1.0E-06	8.6E-01	8.8E-07
				(Total)					3.3E-01			1.3E-05
Air	Air	Any EU-1 or EU-2 location	Inhalation	Aluminum	1.9	N/A	1.0E-03	NF	NC	N/A	N/A	NC
				Antimony	0.0062	N/A	NF	NF	NC	N/A	N/A	NC
				Arsenic	0.0050	N/A	NF	NF	NC	N/A	1.5E+01	NC
				Barium	0.27	N/A	1.4E-04	5.0E-04	NC	N/A	N/A	NC
				Benzene	0.021	3.3E-06	1.7E-03	NF	1.9E-03	1.2E-06	2.7E-02	3.2E-08
				Bis(2-ethylhexyl)phthalate	0.0051	5.0E-10	NF	NF	NC	1.8E-10	1.2E+00	2.1E-10
				Bromodichloromethane	0.00025	3.8E-08	NF	NF	NC	1.4E-08	N/A	NC
				Carbon tetrachloride	0.0020	3.7E-07	5.7E-04	NF	6.4E-04	1.3E-07	5.3E-02	6.9E-09
				Chlorobenzene	0.0076	1.1E-06	1.7E-02	NF	6.5E-05	3.9E-07	N/A	NC
				Chloroethane	0.015	2.6E-06	2.9E+00	1.0E+01	9.1E-07	9.3E-07	N/A	NC
				Chloroform	0.012	1.9E-06	8.6E-05	NF	2.2E-02	6.8E-07	8.1E-02	5.5E-08
				Chromium	0.0078	N/A	2.9E-05	1.0E-04	NC	N/A	4.2E+01	NC
				Cobalt	0.032	N/A	5.0E-06	NF	NC	N/A	N/A	NC
				Dichlorobenzene, 1,4-	0.0083	1.1E-06	2.3E-01	8.0E-01	4.9E-06	4.0E-07	2.2E-02	8.9E-09
				Dichloroethane, 1,1-	0.053	8.5E-06	1.4E-01	5.0E-01	6.0E-05	3.0E-06	N/A	NC
				Dichloroethane, 1,2-	0.013	2.0E-06	1.4E-03	NF	1.4E-03	7.1E-07	9.1E-02	6.4E-08
				Dichloroethene, 1,1-	0.018	3.2E-06	NF	NF	NC	1.1E-06	1.8E-01	2.0E-07
				Dichloroethene, 1,2- (cis)	0.41	6.6E-05	NF	NF	NC	2.4E-05	N/A	NC
				Dichloroethene, 1,2- (trans)	0.0039	6.6E-07	NF	NF	NC	2.4E-07	N/A	NC
				Iron	5.1	N/A	NF	NF	NC	N/A	N/A	NC
				Manganese	2.9	N/A	1.4E-05	5.0E-05	NC	N/A	N/A	NC
				Methyl tert butyl ether	0.016	2.3E-06	8.6E-01	3.0E+00	2.7E-06	8.2E-07	N/A	NC
				Tetrachloroethane, 1,1,2,2-	0.015	1.7E-06	NF	NF	NC	6.0E-07	2.0E-01	1.2E-07

TABLE 7.7 RME
CALCULATION OF NON-CANCER HAZARDS AND CANCER RISKS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC Value (mg/L)	Intake (Non-Cancer) (mg/kg•day)	Reference Dose (mg/kg•day)	Reference Concentration (mg/m ³)	Hazard Quotient	Intake (Cancer) (mg/kg•day)	Cancer Slope Factor (mg/kg•day) ¹	Cancer Risk
Groundwater	Air	Any EU-1 or EU-2 location	Inhalation	Tetrachloroethene	0.11	1.6E-05	1.4E-01	NF	1.1E-04	5.6E-06	1.0E-02	5.6E-08
				Thallium	0.0073	N/A	NF	NF	NC	N/A	N/A	NC
				Trichloroethane, 1,1,1-Trichloroethene	0.072	1.1E-05	6.3E-01	NF	1.7E-05	3.8E-06	N/A	NC
				Vanadium	0.33	4.9E-05	1.0E-02	NF	4.9E-03	1.8E-05	4.0E-01	7.0E-06
				Vinyl chloride	0.0040	N/A	NF	NF	NC	N/A	N/A	NC
				(Total)	0.031	1.9E-06	2.9E-02	1.0E-01	6.8E-05	6.9E-07	1.5E-02	1.1E-08
Landfill Gas	Air	Any EU-1 or EU-2 location	Inhalation	Benzene	EPC (mg/m ³)		4.5E-05	1.7E-03	NF	2.6E-02	1.6E-05	2.7E-02
				Vinyl chloride	0.000718	4.9E-06				1.7E-04	1.8E-06	1.5E-02
				(Total)	0.0007872					2.6E-02		
Total Hazard Index Across All Exposure Routes/Pathways									4.2E-01	Total Cancer Risk		2.3E-05

Table 8 Series
Summary of Receptor Risks and Hazards for COPCs

TABLE 8.1a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	4.8E-09	--	3.1E-10	5.1E-09	liver	6.6E-05	--	4.3E-06	7.0E-05	
			Aluminum	NC	--	NC	NC		CNS	1.5E-02	--	2.4E-03	1.7E-02
			Antimony	NC	--	NC	NC		blood	1.7E-03	--	1.1E-03	2.9E-03
			Aroclor-1242	1.0E-08	--	7.9E-10	1.1E-08		immunologic	1.8E-03	--	1.4E-04	1.9E-03
			Aroclor-1248	2.6E-08	--	2.0E-09	2.8E-08		immunologic	4.6E-03	--	3.5E-04	4.9E-03
			Aroclor-1254	2.4E-08	--	1.9E-09	2.6E-08		immunologic	4.2E-03	--	3.3E-04	4.6E-03
			Arsenic	2.0E-07	--	1.4E-09	2.1E-07		skin	3.2E-03	--	2.2E-05	3.2E-03
			Barium	NC	--	NC	NC		cardiovascular	7.3E-03	--	9.6E-04	8.2E-03
			Benzo(a)anthracene	1.2E-08	--	1.5E-09	1.3E-08		NF	NC	--	NC	NC
			Benzo(a)pyrene	1.8E-07	--	2.4E-08	2.1E-07		lung	NC	--	NC	NC
			Benzo(b)fluoranthene	1.9E-08	--	2.5E-09	2.1E-08		lung	NC	--	NC	NC
			Benzo(k)fluoranthene	1.3E-09	--	1.7E-10	1.5E-09		NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	6.7E-09	--	8.8E-10	7.6E-09		kidney, liver	1.7E-04	--	2.2E-05	1.9E-04
			Cadmium	NC	--	NC	NC		kidney	2.8E-03	--	4.1E-04	3.2E-03
			Chromium	NC	--	NC	NC		NOAEL	1.1E-02	--	5.7E-03	1.7E-02
			Chrysene	1.4E-10	--	1.8E-11	1.5E-10		NF	NC	--	NC	NC
			Copper	NC	--	NC	NC		GI	8.8E-04	--	1.0E-05	8.9E-04
			Cyanide, total	NC	--	NC	NC		body weight	5.3E-05	--	3.5E-07	5.3E-05
			Iron	NC	--	NC	NC		GI	4.7E-02	--	3.6E-03	5.0E-02
			Lead	NC	--	NC	NC		NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC		CNS	8.9E-03	--	1.5E-03	1.0E-02
			Mercury	NC	--	NC	NC	development, CNS	development, CNS	7.4E-03	--	4.9E-04	7.9E-03
			Naphthalene	NC	--	NC	NC		body weight	2.2E-05	--	1.5E-06	2.4E-05
			Nickel	NC	--	NC	NC	decreased body weight	decreased body weight	8.1E-04	--	1.1E-04	9.2E-04
			Tetrachloroethene	1.8E-10	--	1.2E-11	1.9E-10		CNS, liver	2.4E-06	--	1.6E-07	2.6E-06
			Thallium	NC	--	NC	NC	CNS	CNS	3.9E-03	--	1.3E-04	4.1E-03
			Toxaphene	2.8E-08	--	3.6E-09	3.1E-08		NF	NC	--	NC	NC
			Trichloroethene	1.7E-09	--	1.2E-10	1.8E-09	CNS, kidney	CNS, kidney	1.0E-04	--	6.9E-06	1.1E-04
			Vanadium	NC	--	NC	NC		GI, kidney	6.4E-03	--	1.6E-03	8.0E-03
(Total)				5.2E-07	--	3.9E-08	5.6E-07	(Total)		1.3E-01	--	1.9E-02	1.5E-01

TABLE 8.1a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Current Receptor Population: Trespasser/Visitor Receptor Age: Adolescent			Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
Medium	Exposure Medium	Exposure Point		Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Air	Any Exposure Unit 1 location	Aldrin	--	8.0E-11	--	8.0E-11	NF	--	NC	--	NC		
			Aluminum	--	NC	--	NC	lung	--	6.8E-07	--	6.8E-07		
			Antimony	--	NC	--	NC	NF	--	NC	--	NC		
			Aroclor-1242	--	6.0E-11	--	6.0E-11	NF	--	NC	--	NC		
			Aroclor-1248	--	1.6E-10	--	1.6E-10	NF	--	NC	--	NC		
			Aroclor-1254	--	1.4E-10	--	1.4E-10	NF	--	NC	--	NC		
			Arsenic	--	9.5E-14	--	9.5E-14	NF	--	NC	--	NC		
			Barium	--	NC	--	NC	respiratory, blood pressure		1.7E-07	--	1.7E-07		
			Benzo(a)anthracene	--	8.6E-12	--	8.6E-12			NF	--	NC		
			Benzo(a)pyrene	--	5.2E-11	--	5.2E-11			NF	--	NC		
			Benzo(b)fluoranthene	--	2.9E-12	--	2.9E-12			NF	--	NC		
			Benzo(k)fluoranthene	--	2.3E-13	--	2.3E-13			NF	--	NC		
			Bis(2-ethylhexyl)phthalate	--	5.9E-12	--	5.9E-12			NF	--	NC		
			Cadmium	--	1.2E-13	--	1.2E-13			NF	--	NC		
			Chromium	--	9.4E-12	--	9.4E-12	respiratory		5.5E-08	--	5.5E-08		
			Chrysene	--	3.5E-13	--	3.5E-13			NF	--	NC		
			Copper	--	NC	--	NC			NF	--	NC		
			Cyanide, total	--	NC	--	NC			NF	--	NC		
			Iron	--	NC	--	NC			NF	--	NC		
			Lead	--	NC	--	NC			NF	--	NC		
			Manganese	--	NC	--	NC	CNS		5.8E-07	--	5.8E-07		
			Mercury	--	NC	--	NC			CNS	--	1.3E-02		
			Naphthalene	--	NC	--	NC	nasal		1.5E-04	--	1.5E-04		
			Nickel	--	NC	--	NC			NF	--	NC		
			Tetrachloroethene	--	1.8E-10	--	1.8E-10			NF	--	8.8E-07		
			Thallium	--	NC	--	NC			NF	--	NC		
			Toxaphene	--	6.4E-11	--	6.4E-11			NF	--	NC		
			Trichloroethene	--	1.1E-08	--	1.1E-08			NF	--	1.9E-05		
			Vanadium	--	NC	--	NC			NF	--	NC		
			(Total)	--	1.1E-08	--	1.1E-08			(Total)	--	1.3E-02		
Total Risk Across Surface Soil							5.7E-07	Total Hazard Index Across Surface Soil				1.6E-01		
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	9.2E-08	--	9.2E-08	blood, CNS NF	--	1.4E-02	--	1.4E-02		
			Vinyl chloride	--	5.7E-09	--	5.7E-09		--	9.1E-05	--	9.1E-05		
			(Total)	--	9.8E-08	--	9.8E-08		--	1.4E-02	--	1.4E-02		
Total Risk Across Landfill Gas							9.8E-08	Total Hazard Index Across Landfill Gas				1.4E-02		
Total Risk Across All Media and All Routes							6.7E-07	Total Hazard Index Across All Media and All Routes				1.7E-01		

CNS Central Nervous System.

NF Not found.

NOAEL No Observed Adverse Effect Level.

GI Gastrointestinal tract.

NC Not calculated.

TABLE 8.1b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron Manganese Thallium Vanadium	NC	--	NC	NC	GI	5.6E-02	--	4.4E-03	6.1E-02	
				NC	--	NC	NC	CNS	7.7E-03	--	1.3E-03	9.0E-03	
				NC	--	NC	NC	CNS	6.7E-03	--	2.2E-04	6.9E-03	
				NC	--	NC	NC	Gl, kidney	6.6E-03	--	1.7E-03	8.3E-03	
	Air	Any Exposure Unit 2 location		(Total)	NC	--	NC	(Total)	7.7E-02	--	7.5E-03	8.5E-02	
		Iron Manganese Thallium Vanadium	--	NC	--	NC	NF	--	NC	--	NC		
			--	NC	--	NC	CNS	--	5.0E-07	--	5.0E-07		
			--	NC	--	NC	NF	--	NC	--	NC		
			(Total)	--	NC	--	(Total)	--	5.0E-07	--	5.0E-07		
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					8.5E-02			
Sediment	Sediment	Any Exposure Unit 2 location	Aluminum Antimony Aroclor-1248 Aroclor-1254 Arsenic Barium Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chromium Chrysene Iron Manganese Mercury Thallium Vanadium	NC	--	NC	NC	CNS	1.1E-02	--	1.7E-03	1.2E-02	
				NC	--	NC	NC	blood	4.4E-03	--	2.9E-03	7.3E-03	
				6.1E-09	--	4.7E-10	6.6E-09	immunologic	1.1E-03	--	8.3E-05	1.1E-03	
				5.7E-09	--	4.4E-10	6.2E-09	immunologic	1.0E-03	--	7.8E-05	1.1E-03	
				3.0E-07	--	2.1E-09	3.0E-07	skin	4.7E-03	--	3.2E-05	4.7E-03	
				NC	--	NC	NC	cardiovascular	6.0E-03	--	7.9E-04	6.8E-03	
				9.5E-09	--	1.3E-09	1.1E-08	NF	NC	--	NC	NC	
				1.0E-07	--	1.3E-08	1.1E-07	lung	NC	--	NC	NC	
				1.0E-08	--	1.3E-09	1.1E-08	lung	NC	--	NC	NC	
				8.9E-10	--	1.2E-10	1.0E-09	NF	NC	--	NC	NC	
	Air	Any Exposure Unit 2 location		NC	--	NC	NC	NOAEL	8.7E-03	--	4.4E-03	1.3E-02	
				1.1E-10	--	1.4E-11	1.2E-10	NF	NC	--	NC	NC	
				NC	--	NC	NC	GI	4.8E-02	--	3.7E-03	5.2E-02	
				NC	--	NC	NC	CNS	2.3E-02	--	3.8E-03	2.7E-02	
				NC	--	NC	NC	development, CNS	8.3E-04	--	5.5E-05	8.9E-04	
				NC	--	NC	NC	CNS	2.8E-02	--	9.2E-04	2.9E-02	
				NC	--	NC	NC	Gl, kidney	5.3E-03	--	1.3E-03	6.6E-03	
				(Total)	4.3E-07	--	1.9E-08	(Total)	1.4E-01	--	2.0E-02	1.6E-01	

TABLE 8.1b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	1.5E-06	--	1.5E-06
			Mercury	--	NC	--	NC	CNS	--	1.4E-03	--	1.4E-03
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	1.2E-10	--	1.2E-10	(Total)	--	1.4E-03	--	1.4E-03
Total Risk Across Sediment								4.5E-07	Total Hazard Index Across Sediment			1.6E-01
Surface Water	Surface Water	Any Exposure Unit 2 location	Acetone	NC	--	NC	NC	liver, kidney	8.2E-06	--	1.9E-06	1.0E-05
			Aluminum	NC	--	NC	NC	CNS	1.3E-04	--	1.1E-03	1.2E-03
			Benzene	1.9E-09	--	1.5E-08	1.7E-08	CNS, blood	8.1E-05	--	6.2E-04	7.0E-04
			Cadmium	NC	--	NC	NC	kidney	5.8E-02	--	2.2E-01	2.8E-01
			Chloroform	NC	--	NC	NC	liver	1.2E-05	--	3.6E-05	4.8E-05
			Cobalt	NC	--	NC	NC	NF	2.7E-04	--	3.5E-04	6.2E-04
			Di-n-butylphthalate	NC	--	NC	NC	increased mortality	1.2E-06	--	1.3E-05	1.4E-05
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	1.0E-05	--	3.7E-05	4.8E-05
			Dichloroethene, 1,2- (total)	NC	--	NC	NC	liver	1.4E-04	--	5.8E-04	7.2E-04
			Dieldrin	1.0E-08	--	5.4E-08	6.5E-08	liver	9.0E-05	--	4.7E-04	5.6E-04
			Iron	NC	--	NC	NC	GI	1.4E-03	--	5.3E-03	6.7E-03
			Manganese	NC	--	NC	NC	CNS	4.4E-02	--	3.6E-01	4.1E-01
			Mercury	NC	--	NC	NC	development, CNS	8.1E-05	--	2.7E-04	3.5E-04
			Nickel	NC	--	NC	NC	decreased body weight	6.1E-04	--	4.0E-03	4.6E-03
			Nitrophenol, 2-	NC	--	NC	NC	NF	3.0E-05	--	1.0E-04	1.3E-04
			Tetrachloroethene	7.3E-09	--	1.2E-07	1.2E-07	CNS, liver	9.9E-05	--	1.6E-03	1.7E-03
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	2.2E-06	--	1.2E-05	1.4E-05
			Trichloroethene	7.0E-08	--	3.9E-07	4.6E-07	CNS, kidney	4.1E-03	--	2.3E-02	2.7E-02
			Vanadium	NC	--	NC	NC	GI, kidney	1.0E-04	--	1.3E-03	1.4E-03
			Vinyl Chloride	8.0E-08	--	2.2E-07	3.0E-07	CNS	2.5E-04	--	6.8E-04	9.3E-04
			(Total)	1.7E-07	--	7.9E-07	9.6E-07	(Total)	1.1E-01	--	6.2E-01	7.3E-01
			Air	Any Exposure Unit 2 location				Acetone	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	NC	--	NC
			Benzene	--	1.5E-09	--	1.5E-09	blood, CNS	--	2.2E-04	--	2.2E-04
			Chloroform	--	2.2E-09	--	2.2E-09	NF	--	2.2E-03	--	2.2E-03
			Cobalt	--	NC	--	NC	NF	--	NC	--	NC
			Di-n-butylphthalate	--	NC	--	NC	NF	--	NC	--	NC
			Dichloroethane, 1,1-	--	NC	--	NC	NF	--	1.1E-05	--	1.1E-05
			Dichloroethene, 1,2- (total)	--	NC	--	NC	NF	--	NC	--	NC
			Dieldrin	--	7.1E-10	--	7.1E-10	NF	--	NC	--	NC
			Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	NC	--	NC
			Mercury	--	NC	--	NC	CNS	--	3.5E-04	--	3.5E-04
			Nickel	--	NC	--	NC	NF	--	NC	--	NC
			Nitrophenol, 2-	--	NC	--	NC	NF	--	NC	--	NC

TABLE 8.1b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Current
Receptor Population:	Trespasser/Visitor
Receptor Age:	Adolescent

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient										
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total						
Surface Water	Air	Any Exposure Unit 2 location	Tetrachloroethene	--	2.0E-09	--	2.0E-09	NF	--	1.0E-05	--	1.0E-05						
			Trichloroethane, 1,1,1-	--	NC	--	NC	NF	--	1.4E-06	--	1.4E-06						
			Trichloroethylene	--	1.0E-07	--	1.0E-07	NF	--	1.8E-04	--	1.8E-04						
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC						
			Vinyl Chloride	--	1.7E-09	--	1.7E-09	NF	--	2.6E-05	--	2.6E-05						
			(Total)	--	1.1E-07	--	1.1E-07	(Total)	--	3.0E-03	--	3.0E-03						
Total Risk Across Surface Water								Total Risk Across Surface Water										
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	1.8E-07	--	1.8E-07	blood, CNS	--	2.8E-02	--	2.8E-02						
			Vinyl chloride	--	1.1E-08	--	1.1E-08	NF	--	1.8E-04	--	1.8E-04						
			(Total)	--	2.0E-07	--	2.0E-07	(Total)	--	2.8E-02	--	2.8E-02						
				Total Risk Across Landfill Gas				Total Hazard Index Across Landfill Gas										
Total Risk Across All Media and All Routes								Total Hazard Index Across All Media and All Routes										
1.1E-06								1.0E+00										
2.0E-07								2.8E-02										
1.7E-06								1.0E+00										

CNS Central Nervous System.

NOAEL No Observed Adverse Effect Level.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

TABLE 8.2a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	1.9E-08	--	2.9E-09	2.2E-08	liver	1.1E-04	--	1.6E-05	1.2E-04	
			Aluminum	NC	--	NC	NC		CNS	2.3E-02	--	8.8E-03	3.2E-02
			Antimony	NC	--	NC	NC		blood	2.8E-03	--	4.2E-03	6.9E-03
			Aroclor-1242	4.1E-08	--	7.2E-09	4.8E-08		immunologic	2.9E-03	--	5.0E-04	3.4E-03
			Aroclor-1248	1.0E-07	--	1.9E-08	1.2E-07		immunologic	7.3E-03	--	1.3E-03	8.6E-03
			Aroclor-1254	9.7E-08	--	1.7E-08	1.1E-07		immunologic	6.8E-03	--	1.2E-03	8.0E-03
			Arsenic	8.2E-07	--	1.3E-08	8.3E-07		skin	5.1E-03	--	8.0E-05	5.2E-03
			Barium	NC	--	NC	NC		cardiovascular	1.2E-02	--	3.5E-03	1.5E-02
			Benz(a)anthracene	4.7E-08	--	1.4E-08	6.1E-08		NF	NC	--	NC	NC
			Benz(a)pyrene	7.3E-07	--	2.2E-07	9.5E-07		lung	NC	--	NC	NC
			Benz(b)fluoranthene	7.5E-08	--	2.2E-08	9.7E-08		lung	NC	--	NC	NC
			Benz(k)fluoranthene	5.2E-09	--	1.6E-09	6.8E-09		NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	2.7E-08	--	8.1E-09	3.5E-08		kidney, liver	2.7E-04	--	8.1E-05	3.5E-04
			Cadmium	NC	--	NC	NC		kidney	4.4E-03	--	1.5E-03	6.0E-03
			Chromium	NC	--	NC	NC		NOAEL	1.8E-02	--	2.1E-02	3.9E-02
			Chrysene	5.5E-10	--	1.6E-10	7.1E-10		NF	NC	--	NC	NC
			Copper	NC	--	NC	NC		GI	1.4E-03	--	3.8E-05	1.5E-03
			Cyanide, total	NC	--	NC	NC		body weight	8.5E-05	--	1.3E-06	8.6E-05
			Iron	NC	--	NC	NC		GI	7.5E-02	--	1.3E-02	8.8E-02
			Lead	NC	--	NC	NC		NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC		CNS	1.4E-02	--	5.4E-03	2.0E-02
			Mercury	NC	--	NC	NC	development, CNS	development, CNS	1.2E-02	--	1.8E-03	1.4E-02
			Naphthalene	NC	--	NC	NC		body weight	3.6E-05	--	5.3E-06	4.1E-05
			Nickel	NC	--	NC	NC		decreased body weight	1.3E-03	--	3.9E-04	1.7E-03
			Tetrachloroethene	7.3E-10	--	1.1E-10	8.4E-10	CNS, liver	CNS, liver	3.9E-06	--	5.9E-07	4.5E-06
			Thallium	NC	--	NC	NC		CNS	6.3E-03	--	4.8E-04	6.8E-03
			Toxaphene	1.1E-07	--	3.3E-08	1.4E-07		NF	NC	--	NC	NC
			Trichloroethene	6.9E-09	--	1.1E-09	8.0E-09		CNS, kidney	1.6E-04	--	2.5E-05	1.9E-04
			Vanadium	NC	--	NC	NC	GI, kidney	GI, kidney	1.0E-02	--	5.9E-03	1.6E-02
			(Total)	2.1E-06	--	3.6E-07	2.4E-06		(Total)	1.9E-01	--	6.9E-02	2.7E-01

TABLE 8.2a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Air	Any Exposure Unit 1 location	Aldrin	--	1.9E-09	--	1.9E-09	NF	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	6.4E-06	--	6.4E-06
			Antimony	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1242	--	1.4E-09	--	1.4E-09	NF	--	NC	--	NC
			Aroclor-1248	--	3.7E-09	--	3.7E-09	NF	--	NC	--	NC
			Aroclor-1254	--	3.4E-09	--	3.4E-09	NF	--	NC	--	NC
			Arsenic	--	2.3E-12	--	2.3E-12	NF	--	NC	--	NC
			Barium	--	NC	--	NC	respiratory, blood pressure		1.6E-06	--	1.6E-06
			Benzo(a)anthracene	--	2.0E-10	--	2.0E-10			NF	--	NC
			Benzo(a)pyrene	--	1.2E-09	--	1.2E-09			NF	--	NC
			Benzo(b)fluoranthene	--	6.8E-11	--	6.8E-11			NF	--	NC
			Benzo(k)fluoranthene	--	5.4E-12	--	5.4E-12			NF	--	NC
			Bis(2-ethylhexyl)phthalate	--	1.4E-10	--	1.4E-10			NF	--	NC
			Cadmium	--	2.7E-12	--	2.7E-12	respiratory		NF	--	NC
			Chromium	--	2.2E-10	--	2.2E-10			NF	--	5.2E-07
			Chrysene	--	8.2E-12	--	8.2E-12			NF	--	5.2E-07
			Copper	--	NC	--	NC	NF		NC	--	NC
			Cyanide, total	--	NC	--	NC			NC	--	NC
			Iron	--	NC	--	NC	NF		NC	--	NC
			Lead	--	NC	--	NC			NC	--	NC
			Manganese	--	NC	--	NC	CNS		5.5E-06	--	5.5E-06
			Mercury	--	NC	--	NC			CNS	--	1.2E-01
			Naphthalene	--	NC	--	NC	nasal		1.4E-03	--	1.4E-03
			Nickel	--	NC	--	NC			NF	--	NC
			Tetrachloroethene	--	4.2E-09	--	4.2E-09	NF		8.4E-06	--	8.4E-06
			Thallium	--	NC	--	NC			NC	--	NC
			Toxaphene	--	1.5E-09	--	1.5E-09	NF		NC	--	NC
			Trichloroethene	--	2.5E-07	--	2.5E-07			NF	--	1.8E-04
			Vanadium	--	NC	--	NC	NF		NC	--	NC
			(Total)	--	2.7E-07	--	2.7E-07			(Total)	--	1.2E-01
Total Risk Across Surface Soil				2.7E-06				Total Hazard Index Across Surface Soil			4.0E-01	
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	2.2E-06	--	2.2E-06	blood, CNS NF		1.3E-01	--	1.3E-01
			Vinyl chloride	--	1.4E-07	--	1.4E-07			8.6E-04	--	8.6E-04
			(Total)	--	2.3E-06	--	2.3E-06			1.3E-01	--	1.3E-01
Total Risk Across Landfill Gas				2.3E-06				Total Hazard Index Across Landfill Gas			1.3E-01	
Total Risk Across All Media and All Routes				5.0E-06				Total Hazard Index Across All Media and All Routes			5.3E-01	

CNS Central Nervous System.
NOAEL No Observed Adverse Effect Level.
NF Not found.
GI Gastrointestinal tract.
NC Not calculated.

TABLE 8.2b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Commercial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	4.5E-02	--	8.0E-03	5.3E-02		
			Manganese	NC	--	NC	NC		6.2E-03	--	2.3E-03	8.5E-03		
			Thallium	NC	--	NC	NC		5.4E-03	--	4.0E-04	5.8E-03		
			Vanadium	NC	--	NC	NC		5.3E-03	--	3.1E-03	8.4E-03		
			(Total)	NC	--	NC	NC	(Total)	6.2E-02	--	1.4E-02	7.6E-02		
Surface Soil	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC		
			Manganese	--	NC	--	NC		--	9.5E-06	--	9.5E-06		
			Thallium	--	NC	--	NC		--	NC	--	NC		
			Vanadium	--	NC	--	NC		--	NC	--	NC		
			(Total)	--	NC	--	NC	(Total)	--	9.5E-06	--	9.5E-06		
Total Risk Across Surface Soil								NC	Total Hazard Index Across Surface Soil			7.6E-02		
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	2.2E-06	--	2.2E-06	blood, CNS	--	1.3E-01	--	1.3E-01		
			Vinyl chloride	--	1.4E-07	--	1.4E-07		--	8.6E-04	--	8.6E-04		
			(Total)	--	2.3E-06	--	2.3E-06	(Total)	--	1.3E-01	--	1.3E-01		
Total Risk Across Landfill Gas								2.3E-06	Total Hazard Index Across Landfill Gas			1.3E-01		
Total Risk Across All Media and All Routes								2.3E-06	Total Hazard Index Across All Media and All Routes			2.1E-01		

GI Gastrointestinal tract.

CNS Central Nervous System.

NF Not found.

NC Not calculated.

TABLE 8.3a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	NC	--	NC	NC	liver	2.8E-03	--	4.7E-05	2.8E-03
			Aluminum	NC	--	NC	NC	CNS	6.1E-01	--	2.6E-02	6.4E-01
			Antimony	NC	--	NC	NC	blood	7.2E-02	--	1.2E-02	8.5E-02
			Aroclor-1242	NC	--	NC	NC	immunologic	7.5E-02	--	1.5E-03	7.6E-02
			Aroclor-1248	NC	--	NC	NC	immunologic	1.9E-01	--	3.9E-03	2.0E-01
			Aroclor-1254	NC	--	NC	NC	immunologic	1.8E-01	--	3.6E-03	1.8E-01
			Arsenic	NC	--	NC	NC	skin	1.3E-01	--	2.4E-04	1.3E-01
			Barium	NC	--	NC	NC	cardiovascular	3.0E-01	--	1.0E-02	3.2E-01
			Benzo(a)anthracene	NC	--	NC	NC	NF	NC	--	NC	NC
			Benzo(a)pyrene	NC	--	NC	NC	lung	NC	--	NC	NC
			Benzo(b)fluoranthene	NC	--	NC	NC	lung	NC	--	NC	NC
			Benzo(k)fluoranthene	NC	--	NC	NC	NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	kidney, liver	7.0E-03	--	2.4E-04	7.3E-03
			Cadmium	NC	--	NC	NC	kidney	1.2E-01	--	4.5E-03	1.2E-01
			Chromium	NC	--	NC	NC	NOAEL	4.7E-01	--	6.2E-02	5.3E-01
			Chrysene	NC	--	NC	NC	NF	NC	--	NC	NC
			Copper	NC	--	NC	NC	GI	3.7E-02	--	1.1E-04	3.7E-02
			Cyanide, total	NC	--	NC	NC	body weight	2.2E-03	--	3.8E-06	2.2E-03
			Iron	NC	--	NC	NC	GI	2.0E+00	--	4.0E-02	2.0E+00
			Lead	NC	--	NC	NC	NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	3.7E-01	--	1.6E-02	3.9E-01
			Mercury	NC	--	NC	NC	development, CNS	3.1E-01	--	5.3E-03	3.1E-01
			Naphthalene	NC	--	NC	NC	body weight	9.3E-04	--	1.6E-05	9.5E-04
			Nickel	NC	--	NC	NC	decreased body weight	3.4E-02	--	1.2E-03	3.5E-02
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	1.0E-04	--	1.8E-06	1.0E-04
			Thallium	NC	--	NC	NC	CNS	1.7E-01	--	1.4E-03	1.7E-01
			Toxaphene	NC	--	NC	NC	NF	NC	--	NC	NC
			Trichloroethene	NC	--	NC	NC	CNS, kidney	4.2E-03	--	7.6E-05	4.3E-03
			Vanadium	NC	--	NC	NC	GI, kidney	2.7E-01	--	1.8E-02	2.9E-01
			(Total)	NC	--	NC	NC	(Total)	5.3E+00	--	2.1E-01	5.5E+00
Surface Soil	Air	Any Exposure Unit 1 location	Aldrin	--	NC	--	NC	NF	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	1.1E-04	--	1.1E-04
			Antimony	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1242	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1248	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1254	--	NC	--	NC	NF	--	NC	--	NC
			Arsenic	--	NC	--	NC	NF	--	NC	--	NC

TABLE 8.3a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Air	Any Exposure Unit 1 location	Barium	--	NC	--	NC	respiratory, blood pressure	--	2.6E-05	--	2.6E-05
			Benzo(a)anthracene	--	NC	--	NC		--	NC	--	NC
			Benzo(a)pyrene	--	NC	--	NC		--	NC	--	NC
			Benzo(b)fluoranthene	--	NC	--	NC		--	NC	--	NC
			Benzo(k)fluoranthene	--	NC	--	NC		--	NC	--	NC
			Bis(2-ethylhexyl)phthalate	--	NC	--	NC		--	NC	--	NC
			Cadmium	--	NC	--	NC		--	NC	--	NC
			Chromium	--	NC	--	NC		--	8.6E-06	--	8.6E-06
			Chrysene	--	NC	--	NC		--	NC	--	NC
			Copper	--	NC	--	NC		--	NC	--	NC
			Cyanide, total	--	NC	--	NC		--	NC	--	NC
			Iron	--	NC	--	NC		--	NC	--	NC
			Lead	--	NC	--	NC		--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	9.1E-05	--	9.1E-05
			Mercury	--	NC	--	NC		--	2.0E+00	--	2.0E+00
			Naphthalene	--	NC	--	NC		--	2.4E-02	--	2.4E-02
			Nickel	--	NC	--	NC	NF	--	NC	--	NC
			Tetrachloroethene	--	NC	--	NC		--	1.4E-04	--	1.4E-04
			Thallium	--	NC	--	NC		--	NC	--	NC
			Toxaphene	--	NC	--	NC	NF	--	NC	--	NC
			Trichloroethene	--	NC	--	NC		--	2.9E-03	--	2.9E-03
			Vanadium	--	NC	--	NC		--	NC	--	NC
			(Total)	--	NC	--	NC	(Total)	--	2.0E+00	--	2.0E+00
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					7.5E+00		
Groundwater	Groundwater	Any Exposure Unit 1 location	Aluminum	NC	--	NC	NC	CNS	1.2E-01	--	NC	1.2E-01
			Antimony	NC	--	NC	NC		9.9E-01	--	NC	9.9E-01
			Arsenic	NC	--	NC	NC		1.1E+00	--	NC	1.1E+00
			Barium	NC	--	NC	NC	cardiovascular	2.5E-01	--	NC	2.5E-01
			Benzene	NC	--	NC	NC		4.6E-01	--	4.6E-01	9.1E-01
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC		NF	NC	--	NC
			Bromodichloromethane	NC	--	NC	NC	kidney	8.0E-04	--	8.0E-04	1.6E-03
			Carbon tetrachloride	NC	--	NC	NC		1.8E-01	--	1.8E-01	3.7E-01
			Chlorobenzene	NC	--	NC	NC		2.4E-02	--	2.4E-02	4.8E-02
			Chloroethane	NC	--	NC	NC	liver	2.4E-03	--	2.4E-03	4.9E-03
			Chloroform	NC	--	NC	NC		7.8E-02	--	7.8E-02	1.6E-01
			Chromium	NC	--	NC	NC		1.7E-01	--	NC	1.7E-01
			Cobalt	NC	--	NC	NC	NOAEL	1.0E-01	--	NC	1.0E-01

TABLE 8.3a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 1 location	Dichlorobenzene, 1,4-	NC	--	NC	NC	NF	1.8E-02	--	1.8E-02	3.5E-02
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	3.4E-02	--	3.4E-02	6.8E-02
			Dichloroethane, 1,2-	NC	--	NC	NC	CNS, liver	2.9E-02	--	2.9E-02	5.7E-02
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	1.3E-01	--	1.3E-01	2.6E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	2.6E+00	--	2.6E+00	5.2E+00
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	1.2E-02	--	1.2E-02	2.5E-02
			Iron	NC	--	NC	NC	GI	1.1E+00	--	NC	1.1E+00
			Manganese	NC	--	NC	NC	CNS	9.3E+00	--	NC	9.3E+00
			Methyl tert butyl ether	NC	--	NC	NC	NF	3.4E-02	--	3.4E-02	6.8E-02
			Tetrachloroethane, 1,1,2,2-	NC	--	NC	NC	NF	1.6E-02	--	1.6E-02	3.2E-02
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	7.0E-01	--	7.0E-01	1.4E+00
			Thallium	NC	--	NC	NC	CNS	6.6E+00	--	NC	6.6E+00
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	1.6E-02	--	1.6E-02	3.3E-02
			Trichloroethylene	NC	--	NC	NC	CNS, kidney	7.0E+01	--	7.0E+01	1.4E+02
			Vanadium	NC	--	NC	NC	GI, kidney	3.6E-02	--	NC	3.6E-02
			Vinyl chloride	NC	--	NC	NC	CNS	6.7E-01	--	6.7E-01	1.3E+00
			(Total)	NC	--	NC	NC	(Total)	9.4E+01	--	7.5E+01	1.7E-02
Total Risk Across Groundwater				NC	Total Hazard Index Across Groundwater					1.7E+02		
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	NC	--	NC	blood, CNS	--	2.2E+00	--	2.2E+00
			Vinyl chloride	--	NC	--	NC	NF	--	1.4E-02	--	1.4E-02
			(Total)	--	NC	--	N/A	(Total)	--	2.2E+00	--	2.2E+00
Total Risk Across Landfill Gas				NC	Total Hazard Index Across Landfill Gas					2.2E+00		
Total Risk Across All Media and All Routes				NC	Total Hazard Index Across All Media and All Routes					1.8E+02		

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total GI HI =	3.4E+00
Total kidney HI =	1.4E+02
Total CNS HI =	1.6E+02
Total liver HI =	2.3E+00

TABLE 8.3b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	1.2E+00	--	2.4E-02	1.2E+00
			Manganese	NC	--	NC	NC	CNS	1.6E-01	--	7.0E-03	1.7E-01
			Thallium	NC	--	NC	NC	CNS	1.4E-01	--	1.2E-03	1.4E-01
			Vanadium	NC	--	NC	NC	GI, kidney	1.4E-01	--	9.2E-03	1.5E-01
			(Total)	NC	--	NC	NC	(Total)	1.6E+00	--	4.1E-02	1.7E+00
	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	3.9E-05	--	3.9E-05
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	--	--	NC	(Total)	--	3.9E-05	--	3.9E-05
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					1.7E+00		
Groundwater	Groundwater	Any Exposure Unit 2 location	Aluminum	NC	--	NC	NC	CNS	1.2E-01	--	NC	1.2E-01
			Antimony	NC	--	NC	NC	blood	9.9E-01	--	NC	9.9E-01
			Arsenic	NC	--	NC	NC	skin	1.1E+00	--	NC	1.1E+00
			Barium	NC	--	NC	NC	cardiovascular	2.5E-01	--	NC	2.5E-01
			Benzene	NC	--	NC	NC	CNS, blood	4.6E-01	--	4.6E-01	9.1E-01
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	NF	NC	--	NC	NC
			Bromodichloromethane	NC	--	NC	NC	kidney	8.0E-04	--	8.0E-04	1.6E-03
			Carbon tetrachloride	NC	--	NC	NC	liver	1.8E-01	--	1.8E-01	3.7E-01
			Chlorobenzene	NC	--	NC	NC	liver	2.4E-02	--	2.4E-02	4.8E-02
			Chloroethane	NC	--	NC	NC	NF	2.4E-03	--	2.4E-03	4.9E-03
			Chloroform	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Chromium	NC	--	NC	NC	NOAEL	1.7E-01	--	NC	1.7E-01
			Cobalt	NC	--	NC	NC	NF	1.0E-01	--	NC	1.0E-01
			Dichlorobenzene, 1,4-	NC	--	NC	NC	NF	1.8E-02	--	1.8E-02	3.5E-02
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	3.4E-02	--	3.4E-02	6.8E-02
			Dichloroethane, 1,2-	NC	--	NC	NC	CNS, liver	2.9E-02	--	2.9E-02	5.7E-02
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	1.3E-01	--	1.3E-01	2.6E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	2.6E+00	--	2.6E+00	5.2E+00
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	1.2E-02	--	1.2E-02	2.5E-02
			Iron	NC	--	NC	NC	GI	1.1E+00	--	NC	1.1E+00
			Manganese	NC	--	NC	NC	CNS	9.3E+00	--	NC	9.3E+00

TABLE 8.3b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Groundwater	Groundwater	Any Exposure Unit 2 location	Methyl tert butyl ether	NC	--	NC	NC	NF	3.4E-02	--	3.4E-02	6.8E-02		
			Tetrachloroethane, 1,1,2,2-	NC	--	NC	NC	NF	1.6E-02	--	1.6E-02	3.2E-02		
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	7.0E-01	--	7.0E-01	1.4E+00		
			Thallium	NC	--	NC	NC	CNS	6.6E+00	--	NC	6.6E+00		
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	1.6E-02	--	1.6E-02	3.3E-02		
			Trichloroethene	NC	--	NC	NC	CNS, kidney	7.0E+01	--	7.0E+01	1.4E+02		
			Vanadium	NC	--	NC	NC	GI, kidney	3.6E-02	--	NC	3.6E-02		
			Vinyl chloride	NC	--	NC	NC	CNS	6.7E-01	--	6.7E-01	1.3E+00		
			(Total)	NC	--	NC	NC	(Total)	9.4E+01	--	7.5E+01	1.7E+02		
			Total Risk Across Groundwater				NC	Total Hazard Index Across Groundwater				1.7E+02		
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	NC	--	NC	blood, CNS	--	2.2E+00	--	2.2E+00		
			Vinyl chloride	--	NC	--	NC	NF	--	1.4E-02	--	1.4E-02		
			(Total)	--	NC	--	N/A	(Total)	--	2.2E+00	--	2.2E+00		
			Total Risk Across Landfill Gas				NC	Total Hazard Index Across Landfill Gas				2.2E+00		
Total Risk Across All Media and All Routes				Total Hazard Index Across All Media and All Routes				Total Hazard Index Across All Media and All Routes				1.7E+02		
Total GI HI = 2.5E+00 Total kidney HI = 1.4E+02 Total CNS HI = 1.6E+02 Total liver HI = 2.3E+00														

GI Gastrointestinal tract.
 CNS Central Nervous System.
 NC Not calculated.
 N/A Not applicable.
 NF Not found.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

TABLE 8.4a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	NC	--	NC	NC	liver	2.9E-04	--	2.7E-05	3.2E-04
			Aluminum	NC	--	NC	NC	CNS	6.5E-02	--	1.5E-02	8.0E-02
			Antimony	NC	--	NC	NC	blood	7.7E-03	--	7.0E-03	1.5E-02
			Aroclor-1242	NC	--	NC	NC	immunologic	8.0E-03	--	8.5E-04	8.8E-03
			Aroclor-1248	NC	--	NC	NC	immunologic	2.1E-02	--	2.2E-03	2.3E-02
			Aroclor-1254	NC	--	NC	NC	immunologic	1.9E-02	--	2.0E-03	2.1E-02
			Arsenic	NC	--	NC	NC	skin	1.4E-02	--	1.4E-04	1.4E-02
			Barium	NC	--	NC	NC	cardiovascular	3.3E-02	--	5.9E-03	3.9E-02
			Benzo(a)anthracene	NC	--	NC	NC	NF	NC	--	NC	NC
			Benzo(a)pyrene	NC	--	NC	NC	lung	NC	--	NC	NC
			Benzo(b)fluoranthene	NC	--	NC	NC	lung	NC	--	NC	NC
			Benzo(k)fluoranthene	NC	--	NC	NC	NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	kidney, liver	7.5E-04	--	1.4E-04	8.9E-04
			Cadmium	NC	--	NC	NC	kidney	1.2E-02	--	2.6E-03	1.5E-02
			Chromium	NC	--	NC	NC	NOAEL	5.1E-02	--	3.5E-02	8.6E-02
			Chrysene	NC	--	NC	NC	NF	NC	--	NC	NC
			Copper	NC	--	NC	NC	GI	4.0E-03	--	6.4E-05	4.0E-03
			Cyanide, total	NC	--	NC	NC	body weight	2.4E-04	--	2.1E-06	2.4E-04
			Iron	NC	--	NC	NC	GI	2.1E-01	--	2.2E-02	2.3E-01
			Lead	NC	--	NC	NC	NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	4.0E-02	--	9.0E-03	4.9E-02
			Mercury	NC	--	NC	NC	development, CNS	3.3E-02	--	3.0E-03	3.6E-02
			Naphthalene	NC	--	NC	NC	body weight	1.0E-04	--	9.0E-06	1.1E-04
			Nickel	NC	--	NC	NC	decreased body weight	3.6E-03	--	6.6E-04	4.3E-03
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	1.1E-05	--	9.9E-07	1.2E-05
			Thallium	NC	--	NC	NC	CNS	1.8E-02	--	8.0E-04	1.9E-02
			Toxaphene	NC	--	NC	NC	NF	NC	--	NC	NC
			Trichloroethene	NC	--	NC	NC	CNS, kidney	4.5E-04	--	4.3E-05	4.9E-04
			Vanadium	NC	--	NC	NC	GI, kidney	2.9E-02	--	1.0E-02	3.9E-02
			(Total)	NC	--	NC	NC	(Total)	5.7E-01	--	1.2E-01	6.9E-01
	Air	Any Exposure Unit 1 location	Aldrin	--	NC	--	NC	NF	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	3.7E-05	--	3.7E-05
			Antimony	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1242	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1248	--	NC	--	NC	NF	--	NC	--	NC

TABLE 8.4a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Air	Any Exposure Unit 1 location	Aroclor-1254	--	NC	--	NC	NF	--	NC	--	NC
			Arsenic	--	NC	--	NC	NF	--	NC	--	NC
			Barium	--	NC	--	NC	respiratory, blood pressure	9.1E-06	--	9.1E-06	9.1E-06
			Benzo(a)anthracene	--	NC	--	NC					
			Benzo(a)pyrene	--	NC	--	NC	NF	--	NC	--	NC
			Benzo(b)fluoranthene	--	NC	--	NC	NF	--	NC	--	NC
			Benzo(k)fluoranthene	--	NC	--	NC	NF	--	NC	--	NC
			Bis(2-ethylhexyl)phthalate	--	NC	--	NC	NF	--	NC	--	NC
			Cadmium	--	NC	--	NC	NF	--	NC	--	NC
			Chromium	--	NC	--	NC	respiratory	3.0E-06	--	3.0E-06	3.0E-06
			Chrysene	--	NC	--	NC					
			Copper	--	NC	--	NC	NF	--	NC	--	NC
			Cyanide, total	--	NC	--	NC	NF	--	NC	--	NC
			Iron	--	NC	--	NC	NF	--	NC	--	NC
			Lead	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	3.2E-05	--	3.2E-05
			Mercury	--	NC	--	NC	CNS	--	7.0E-01	--	7.0E-01
			Naphthalene	--	NC	--	NC	nasal	--	8.3E-03	--	8.3E-03
			Nickel	--	NC	--	NC	NF	--	NC	--	NC
			Tetrachloroethene	--	NC	--	NC	NF	--	4.9E-05	--	4.9E-05
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Toxaphene	--	NC	--	NC	NF	--	NC	--	NC
			Trichloroethene	--	NC	--	NC	NF	--	1.0E-03	--	1.0E-03
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	NC	--	NC	(Total)	7.1E-01	--	7.1E-01	7.1E-01
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					1.4E+00		
Groundwater	Groundwater	Any Exposure Unit 1 location	Aluminum	NC	--	NC	NC	CNS	5.2E-02	--	NC	5.2E-02
			Antimony	NC	--	NC	NC	blood	4.2E-01	--	NC	4.2E-01
			Arsenic	NC	--	NC	NC	skin	4.6E-01	--	NC	4.6E-01
			Barium	NC	--	NC	NC	cardiovascular	1.1E-01	--	NC	1.1E-01
			Benzene	NC	--	NC	NC		CNS, blood	2.0E-01	--	2.0E-01
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	NF	NC	--	NC	NC
			Bromodichloromethane	NC	--	NC	NC	kidney	3.4E-04	--	3.4E-04	6.8E-04
			Carbon tetrachloride	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Chlorobenzene	NC	--	NC	NC	liver	1.0E-02	--	1.0E-02	2.1E-02
			Chloroethane	NC	--	NC	NC	liver	1.0E-03	--	1.0E-03	2.1E-03

TABLE 8.4a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 1 location	Chloroform	NC	--	NC	NC	NF	3.3E-02	--	3.3E-02	6.7E-02
			Chromium	NC	--	NC	NC	liver	7.1E-02	--	NC	7.1E-02
			Cobalt	NC	--	NC	NC	NOAEL	4.4E-02	--	NC	4.4E-02
			Dichlorobenzene, 1,4-	NC	--	NC	NC	NF	7.6E-03	--	7.6E-03	1.5E-02
			Dichloroethane, 1,1-	NC	--	NC	NC	NF	1.5E-02	--	1.5E-02	2.9E-02
			Dichloroethane, 1,2-	NC	--	NC	NC	NOAEL	1.2E-02	--	1.2E-02	2.5E-02
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	5.6E-02	--	5.6E-02	1.1E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	CNS, liver	1.1E+00	--	1.1E+00	2.2E+00
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	blood	5.3E-03	--	5.3E-03	1.1E-02
			Iron	NC	--	NC	NC	liver	4.7E-01	--	NC	4.7E-01
			Manganese	NC	--	NC	NC	GI	4.0E+00	--	NC	4.0E+00
			Methyl tert butyl ether	NC	--	NC	NC	CNS	1.5E-02	--	1.5E-02	2.9E-02
			Tetrachloroethane, 1,1,2,2-	NC	--	NC	NC	NF	6.9E-03	--	6.9E-03	1.4E-02
			Tetrachloroethylene	NC	--	NC	NC	NF	3.0E-01	--	3.0E-01	6.0E-01
			Thallium	NC	--	NC	NC	CNS, liver	2.8E+00	--	NC	2.8E+00
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	7.0E-03	--	7.0E-03	1.4E-02
			Trichloroethylene	NC	--	NC	NC	CNS	3.0E+01	--	3.0E+01	6.0E+01
			Vanadium	NC	--	NC	NC	CNS, kidney	1.5E-02	--	NC	1.5E-02
			Vinyl chloride	NC	--	NC	NC	GI, kidney	2.9E-01	--	2.9E-01	5.7E-01
			(Total)	NC	--	NC	NC	(Total)	4.0E+01	--	3.2E+01	7.2E+01
Total Risk Across Groundwater								NC	Total Hazard Index Across Groundwater			7.2E+01
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	NC	--	NC	blood, CNS	--	7.6E-01	--	7.6E-01
			Vinyl chloride	--	NC	--	NC	NF	--	5.0E-03	--	5.0E-03
			(Total)	--	NC	--	N/A	(Total)	--	7.7E-01	--	7.7E-01

CNS Central Nervous System.

NOAEL No Observed Adverse Effect Level.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total Risk Across Landfill Gas

Total Risk Across All Media and All Routes

NC

NC

Total Hazard Index Across Landfill Gas

7.7E-01

Total Hazard Index Across All Media and All Routes

7.4E+01

Total GI HI =

4.8E+00

Total kidney HI =

6.5E-01

Total CNS HI =

6.7E+01

Total liver HI =

5.9E+00

TABLE 8.4b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	1.3E-01	--	1.3E-02	1.4E-01
			Manganese	NC	--	NC	NC	CNS	1.7E-02	--	3.9E-03	2.1E-02
			Thallium	NC	--	NC	NC	CNS	1.5E-02	--	6.8E-04	1.6E-02
			Vanadium	NC	--	NC	NC	GI, kidney	1.5E-02	--	5.2E-03	2.0E-02
			(Total)	NC	--	NC	NC	(Total)	1.7E-01	--	2.3E-02	2.0E-01
	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	1.4E-05	--	1.4E-05
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	NC	--	NC	(Total)	--	1.4E-05	--	1.4E-05
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					2.0E-01		
Groundwater	Groundwater	Any Exposure Unit 2 location	Aluminum	NC	--	NC	NC	CNS	5.2E-02	--	NC	5.2E-02
			Antimony	NC	--	NC	NC	blood	4.2E-01	--	NC	4.2E-01
			Arsenic	NC	--	NC	NC	skin	4.6E-01	--	NC	4.6E-01
			Barium	NC	--	NC	NC	cardiovascular	1.1E-01	--	NC	1.1E-01
			Benzene	NC	--	NC	NC	CNS, blood	2.0E-01	--	2.0E-01	3.9E-01
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	NF	NC	--	NC	NC
			Bromodichloromethane	NC	--	NC	NC	kidney	3.4E-04	--	3.4E-04	6.8E-04
			Carbon tetrachloride	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Chlorobenzene	NC	--	NC	NC	liver	1.0E-02	--	1.0E-02	2.1E-02
			Chloroethane	NC	--	NC	NC	NF	1.0E-03	--	1.0E-03	2.1E-03
			Chloroform	NC	--	NC	NC	liver	3.3E-02	--	3.3E-02	6.7E-02
			Chromium	NC	--	NC	NC	NOAEL	7.1E-02	--	NC	7.1E-02
			Cobalt	NC	--	NC	NC	NF	4.4E-02	--	NC	4.4E-02
			Dichlorobenzene, 1,4-	NC	--	NC	NC	NF	7.6E-03	--	7.6E-03	1.5E-02
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	1.5E-02	--	1.5E-02	2.9E-02
			Dichloroethane, 1,2-	NC	--	NC	NC	CNS, liver	1.2E-02	--	1.2E-02	2.5E-02
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	5.6E-02	--	5.6E-02	1.1E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	1.1E+00	--	1.1E+00	2.2E+00
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	5.3E-03	--	5.3E-03	1.1E-02
			Iron	NC	--	NC	NC	GI	4.7E-01	--	NC	4.7E-01
			Manganese	NC	--	NC	NC	CNS	4.0E+00	--	NC	4.0E+00
			Methyl tert butyl ether	NC	--	NC	NC	NF	1.5E-02	--	1.5E-02	2.9E-02
			Tetrachloroethane, 1,1,2,2-	NC	--	NC	NC	NF	6.9E-03	--	6.9E-03	1.4E-02

TABLE 8.4b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 2 location	Tetrachloroethene	NC	--	NC	NC	CNS, liver	3.0E-01	--	3.0E-01	6.0E-01
			Thallium	NC	--	NC	NC	CNS	2.8E+00	--	NC	2.8E+00
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	7.0E-03	--	7.0E-03	1.4E-02
			Trichloroethene	NC	--	NC	NC	CNS, kidney	3.0E+01	--	3.0E+01	6.0E+01
			Vanadium	NC	--	NC	NC	GI, kidney	1.5E-02	--	NC	1.5E-02
			Vinyl chloride	NC	--	NC	NC	CNS	2.9E-01	--	2.9E-01	5.7E-01
			(Total)	NC	--	NC	NC	(Total)	4.0E+01	--	3.2E+01	7.2E+01
Total Risk Across Groundwater								Total Hazard Index Across Groundwater				7.2E+01
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	NC	--	NC	blood, CNS	--	7.6E-01	--	7.6E-01
			Vinyl chloride	--	NC	--	NC	NF	--	5.0E-03	--	5.0E-03
			(Total)	--	NC	--	N/A	(Total)	--	7.7E-01	--	7.7E-01
Total Risk Across Landfill Gas								Total Hazard Index Across Landfill Gas				7.7E-01
Total Risk Across All Media and All Routes								Total Hazard Index Across All Media and All Routes				7.3E+01

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total CNS HI =	6.9E+01
Total kidney HI =	6.0E+01
Total liver HI =	9.9E-01

TABLE 8.5a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	9.2E-08	--	6.0E-09	9.8E-08	liver	NC	--	NC	NC
			Aluminum	NC	--	NC	NC	CNS	NC	--	NC	NC
			Antimony	NC	--	NC	NC	blood	NC	--	NC	NC
			Aroclor-1242	2.0E-07	--	1.5E-08	2.1E-07	immunologic	NC	--	NC	NC
			Aroclor-1248	5.0E-07	--	3.9E-08	5.4E-07	immunologic	NC	--	NC	NC
			Aroclor-1254	4.7E-07	--	3.6E-08	5.0E-07	immunologic	NC	--	NC	NC
			Arsenic	3.9E-06	--	2.7E-08	3.9E-06	skin	NC	--	NC	NC
			Barium	NC	--	NC	NC	cardiovascular	NC	--	NC	NC
			Benzo(a)anthracene	2.3E-07	--	3.0E-08	2.6E-07	NF	NC	--	NC	NC
			Benzo(a)pyrene	3.5E-06	--	4.6E-07	4.0E-06	lung	NC	--	NC	NC
			Benzo(b)fluoranthene	3.6E-07	--	4.7E-08	4.1E-07	lung	NC	--	NC	NC
			Benzo(k)fluoranthene	2.5E-08	--	3.3E-09	2.8E-08	NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	1.3E-07	--	1.7E-08	1.5E-07	kidney, liver	NC	--	NC	NC
			Cadmium	NC	--	NC	NC	kidney	NC	--	NC	NC
			Chromium	NC	--	NC	NC	NOAEL	NC	--	NC	NC
			Chrysene	2.6E-09	--	3.5E-10	3.0E-09	NF	NC	--	NC	NC
			Copper	NC	--	NC	NC	GI	NC	--	NC	NC
			Cyanide, total	NC	--	NC	NC	body weight	NC	--	NC	NC
			Iron	NC	--	NC	NC	GI	NC	--	NC	NC
			Lead	NC	--	NC	NC	NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	NC	--	NC	NC
			Mercury	NC	--	NC	NC	development, CNS	NC	--	NC	NC
			Naphthalene	NC	--	NC	NC	body weight	NC	--	NC	NC
			Nickel	NC	--	NC	NC	decreased body weight	NC	--	NC	NC
			Tetrachloroethene	3.5E-09	--	2.3E-10	3.7E-09	CNS, liver	NC	--	NC	NC
			Thallium	NC	--	NC	NC	CNS	NC	--	NC	NC
			Toxaphene	5.3E-07	--	7.0E-08	6.0E-07	NF	NC	--	NC	NC
			Trichloroethene	3.3E-08	--	2.3E-09	3.5E-08	CNS, kidney	NC	--	NC	NC
			Vanadium	NC	--	NC	NC	GI, kidney	NC	--	NC	NC
			(Total)	1.0E-05	--	7.6E-07	1.1E-05		(Total)	NC	--	NC
Air	Any Exposure Unit 1 location		Aldrin	--	1.5E-08	--	1.5E-08	NF	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	NC	--	NC
			Antimony	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1242	--	1.1E-08	--	1.1E-08	NF	--	NC	--	NC
			Aroclor-1248	--	2.8E-08	--	2.8E-08	NF	--	NC	--	NC

TABLE 8.5a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Air	Any Exposure Unit 1 location	Aroclor-1254	--	2.6E-08	--	2.6E-08	NF	--	NC	--	NC
			Arsenic	--	1.7E-11	--	1.7E-11	NF	--	NC	--	NC
			Barium	--	NC	--	NC	respiratory, blood pressure	--	NC	--	NC
			Benzo(a)anthracene	--	1.6E-09	--	1.6E-09		NF	--	NC	--
			Benzo(a)pyrene	--	9.4E-09	--	9.4E-09		NF	--	NC	--
			Benzo(b)fluoranthene	--	5.2E-10	--	5.2E-10		NF	--	NC	--
			Benzo(k)fluoranthene	--	4.1E-11	--	4.1E-11		NF	--	NC	--
			Bis(2-ethylhexyl)phthalate	--	1.1E-09	--	1.1E-09		NF	--	NC	--
			Cadmium	--	2.1E-11	--	2.1E-11		NF	--	NC	--
			Chromium	--	1.7E-09	--	1.7E-09	respiratory	--	NC	--	NC
			Chrysene	--	6.2E-11	--	6.2E-11		NF	--	NC	--
			Copper	--	NC	--	NC		NF	--	NC	--
			Cyanide, total	--	NC	--	NC		NF	--	NC	--
			Iron	--	NC	--	NC		NF	--	NC	--
			Lead	--	NC	--	NC		NF	--	NC	--
			Manganese	--	NC	--	NC	CNS	--	NC	--	NC
			Mercury	--	NC	--	NC		CNS	--	NC	--
			Naphthalene	--	NC	--	NC	nasal	--	NC	--	NC
			Nickel	--	NC	--	NC		NF	--	NC	--
			Tetrachloroethene	--	3.2E-08	--	3.2E-08		NF	--	NC	--
			Thallium	--	NC	--	NC		NF	--	NC	--
			Toxaphene	--	1.2E-08	--	1.2E-08		NF	--	NC	--
			Trichloroethene	--	1.9E-06	--	1.9E-06		NF	--	NC	--
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	2.0E-06	--	2.0E-06		(Total)	--	NC	--
Total Risk Across Surface Soil				1.3E-05				Total Hazard Index Across Surface Soil				NC
Groundwater	Groundwater	Any Exposure Unit 1 location	Aluminum	NC	--	NC	NC	CNS	NC	--	NC	NC
			Antimony	NC	--	NC	NC		blood	NC	--	NC
			Arsenic	9.4E-05	--	NC	9.4E-05	skin	NC	--	NC	NC
			Barium	NC	--	NC	NC		cardiovascular	NC	--	NC
			Benzene	1.5E-05	--	1.5E-05	2.9E-05			NC	--	NC
			Bis(2-ethylhexyl)phthalate	7.1E-05	--	7.1E-05	1.4E-04	CNS, blood	NC	--	NC	NC
			Bromodichloromethane	1.9E-07	--	1.9E-07	3.9E-07		NC	--	NC	
			Carbon tetrachloride	3.3E-06	--	3.3E-06	6.5E-06	kidney	liver	NC	--	NC
			Chlorobenzene	NC	--	NC	NC		liver	NC	--	NC

TABLE 8.5a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 1 location	Chloroethane	5.6E-07	--	5.6E-07	1.1E-06	NF	NC	--	NC	NC
			Chloroform	NC	--	NC	NC	liver	NC	--	NC	NC
			Chromium	NC	--	NC	NC	NOAEL	NC	--	NC	NC
			Cobalt	NC	--	NC	NC	NF	NC	--	NC	NC
			Dichlorobenzene, 1,4-	2.5E-06	--	2.5E-06	5.0E-06	NF	NC	--	NC	NC
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	NC	--	NC	NC
			Dichloroethane, 1,2-	1.5E-05	--	1.5E-05	3.1E-05	CNS, liver	NC	--	NC	NC
			Dichloroethene, 1,1-	1.4E-04	--	1.4E-04	2.7E-04	CNS, liver	NC	--	NC	NC
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	NC	--	NC	NC
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	NC	--	NC	NC
			Iron	NC	--	NC	NC	GI	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	NC	--	NC	NC
			Methyl tert butyl ether	NC	--	NC	NC	NF	NC	--	NC	NC
			Tetrachloroethane, 1,1,2,2-	3.8E-05	--	3.8E-05	7.5E-05	NF	NC	--	NC	NC
			Tetrachloroethylene	7.1E-05	--	7.1E-05	1.4E-04	CNS, liver	NC	--	NC	NC
			Thallium	NC	--	NC	NC	CNS	NC	--	NC	NC
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	NC	--	NC	NC
			Trichloroethylene	1.6E-03	--	1.6E-03	3.3E-03	CNS, kidney	NC	--	NC	NC
			Vanadium	NC	--	NC	NC	GI, kidney	NC	--	NC	NC
			Vinyl chloride	3.0E-04	--	3.0E-04	5.9E-04	CNS	NC	--	NC	NC
			(Total)	2.4E-03	--	2.3E-03	4.7E-03	(Total)	NC	--	NC	NC
Total Risk Across Groundwater								NC	Total Hazard Index Across Groundwater			NC
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	1.7E-05	--	1.7E-05	blood, CNS NF (Total)	--	NC	--	NC
			Vinyl chloride	--	1.0E-06	--	1.0E-06		--	NC	--	NC
			(Total)	--	1.8E-05	--	1.8E-05		--	NC	--	N/A
CNS	Central Nervous System.			Total Risk Across Landfill Gas				1.8E-05	Total Hazard Index Across Landfill Gas			NC
NOAEL	No Observed Adverse Effect Level.			Total Risk Across All Media and All Routes				4.7E-03	Total Hazard Index Across All Media and All Routes			NC
NF	Not found.											
GI	Gastrointestinal tract.											
NC	Not calculated.											
N/A	Not applicable.											

"Dermal" risks for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

TABLE 8.5b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	NC	--	NC	NC
			Thallium	NC	--	NC	NC	CNS	NC	--	NC	NC
			Vanadium	NC	--	NC	NC	GI, kidney	NC	--	NC	NC
			(Total)	NC	--	NC	NC	(Total)	NC	--	NC	NC
	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	NC	--	NC
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	NC	--	NC	(Total)	--	NC	--	NC
Total Risk Across Surface Soil								Total Hazard Index Across Surface Soil				NC
Groundwater	Groundwater	Any Exposure Unit 2 location	Aluminum	NC	--	NC	NC	CNS	NC	--	NC	NC
			Antimony	NC	--	NC	NC	blood	NC	--	NC	NC
			Arsenic	9.4E-05	--	NC	9.4E-05	skin	NC	--	NC	NC
			Barium	NC	--	NC	NC	cardiovascular	NC	--	NC	NC
			Benzene	1.5E-05	--	1.5E-05	2.9E-05	CNS, blood	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	7.1E-05	--	7.1E-05	1.4E-04	NF	NC	--	NC	NC
			Bromodichloromethane	1.9E-07	--	1.9E-07	3.9E-07	kidney	NC	--	NC	NC
			Carbon tetrachloride	3.3E-06	--	3.3E-06	6.5E-06	liver	NC	--	NC	NC
			Chlorobenzene	NC	--	NC	NC	liver	NC	--	NC	NC
			Chloroethane	5.6E-07	--	5.6E-07	1.1E-06	NF	NC	--	NC	NC
			Chloroform	NC	--	NC	NC	liver	NC	--	NC	NC
			Chromium	NC	--	NC	NC	NOAEL	NC	--	NC	NC
			Cobalt	NC	--	NC	NC	NF	NC	--	NC	NC
			Dichlorobenzene, 1,4-	2.5E-06	--	2.5E-06	5.0E-06	NF	NC	--	NC	NC
			Dichloroethane, 1,1-	NC	--	NC	NC	NOAEL	NC	--	NC	NC
			Dichloroethane, 1,2-	1.5E-05	--	1.5E-05	3.1E-05	CNS, liver	NC	--	NC	NC
			Dichloroethene, 1,1-	1.4E-04	--	1.4E-04	2.7E-04	CNS, liver	NC	--	NC	NC
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	NC	--	NC	NC
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	NC	--	NC	NC
			Iron	NC	--	NC	NC	GI	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	NC	--	NC	NC
			Methyl tert butyl ether	NC	--	NC	NC	NF	NC	--	NC	NC

TABLE 8.5b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 2 location	Tetrachloroethane, 1,1,2,2-Tetrachloroethene	3.8E-05	--	3.8E-05	7.5E-05	NF	NC	--	NC	NC
			Thallium	7.1E-05	--	7.1E-05	1.4E-04	CNS, liver	NC	--	NC	NC
			Trichloroethane, 1,1,1-Trichloroethene	NC	--	NC	NC	CNS	NC	--	NC	NC
			Vanadium	NC	--	NC	NC	CNS	NC	--	NC	NC
			Vinyl chloride	1.6E-03	--	1.6E-03	3.3E-03	CNS, kidney	NC	--	NC	NC
			(Total)	3.0E-04	--	3.0E-04	5.9E-04	GI, kidney	NC	--	NC	NC
				2.4E-03	--	2.3E-03	4.7E-03	CNS	NC	--	NC	NC
								(Total)	NC	--	NC	NC
Total Risk Across Groundwater								4.7E-03	Total Hazard Index Across Groundwater			NC
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	1.7E-05	--	1.7E-05	blood, CNS	--	NC	--	NC
			Vinyl chloride	--	1.0E-06	--	1.0E-06	NF	--	NC	--	NC
			(Total)	--		--	1.8E-05	(Total)	--	NC	--	N/A
Total Risk Across Landfill Gas								1.8E-05	Total Hazard Index Across Landfill Gas			NC
Total Risk Across All Media and All Routes								4.7E-03	Total Hazard Index Across All Media and All Routes			NC

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" risks for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

TABLE 8.6a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aldrin	1.0E-09	--	1.3E-10	1.1E-09	liver	4.1E-04	--	5.3E-05	4.6E-04
			Aluminum	NC	--	NC	NC	CNS	9.1E-02	--	2.9E-02	1.2E-01
			Antimony	NC	--	NC	NC	blood	1.1E-02	--	1.4E-02	2.5E-02
			Aroclor-1242	2.1E-09	--	3.2E-10	2.4E-09	immunologic	4.5E-03	--	6.7E-04	5.1E-03
			Aroclor-1248	5.5E-09	--	8.2E-10	6.3E-09	immunologic	1.1E-02	--	1.7E-03	1.3E-02
			Aroclor-1254	5.1E-09	--	7.6E-10	5.8E-09	immunologic	1.1E-02	--	1.6E-03	1.2E-02
			Arsenic	4.3E-08	--	5.7E-10	4.3E-08	skin	2.0E-02	--	2.7E-04	2.0E-02
			Barium	NC	--	NC	NC	cardiovascular	4.5E-02	--	1.2E-02	5.7E-02
			Benzo(a)anthracene	2.5E-09	--	6.3E-10	3.1E-09	NF	NC	--	NC	NC
			Benzo(a)pyrene	3.8E-08	--	9.8E-09	4.8E-08	lung	NC	--	NC	NC
			Benzo(b)fluoranthene	3.9E-09	--	1.0E-09	4.9E-09	lung	NC	--	NC	NC
			Benzo(k)fluoranthene	2.7E-10	--	7.0E-11	3.4E-10	NF	NC	--	NC	NC
			Bis(2-ethylhexyl)phthalate	1.4E-09	--	3.6E-10	1.8E-09	kidney, liver	1.0E-03	--	2.7E-04	1.3E-03
			Cadmium	NC	--	NC	NC	kidney	1.7E-02	--	5.1E-03	2.2E-02
			Chromium	NC	--	NC	NC	NOAEL	1.1E-02	--	1.0E-02	2.1E-02
			Chrysene	2.9E-11	--	7.3E-12	3.6E-11	NF	NC	--	NC	NC
			Copper	NC	--	NC	NC	GI	5.5E-03	--	1.3E-04	5.7E-03
			Cyanide, total	NC	--	NC	NC	body weight	3.3E-04	--	4.2E-06	3.3E-04
			Iron	NC	--	NC	NC	GI	2.9E-01	--	4.4E-02	3.4E-01
			Lead	NC	--	NC	NC	NF	NC	--	NC	NC
			Manganese	NC	--	NC	NC	CNS	8.0E-03	--	2.6E-03	1.1E-02
			Mercury	NC	--	NC	NC	development, CNS	4.6E-02	--	5.9E-03	5.2E-02
			Naphthalene	NC	--	NC	NC	body weight	1.4E-04	--	1.8E-05	1.6E-04
			Nickel	NC	--	NC	NC	decreased body weight	5.1E-03	--	1.3E-03	6.4E-03
			Tetrachloroethene	3.8E-11	--	4.9E-12	4.3E-11	CNS, liver	1.5E-06	--	2.0E-07	1.7E-06
			Thallium	NC	--	NC	NC	CNS	2.5E-02	--	1.6E-03	2.6E-02
			Toxaphene	5.8E-09	--	1.5E-09	7.2E-09	NF	NC	--	NC	NC
			Trichloroethene	3.6E-10	--	4.8E-11	4.1E-10	CNS, kidney	6.2E-04	--	8.5E-05	7.1E-04
			Vanadium	NC	--	NC	NC	GI, kidney	4.0E-02	--	2.0E-02	6.0E-02
			(Total)	1.1E-07	NC	1.6E-08	1.2E-07	(Total)	6.5E-01	--	1.5E-01	8.0E-01
Air	Air	Any Exposure Unit 1 location	Aldrin	--	1.6E-10	--	1.6E-10	NF	--	NC	--	NC
			Aluminum	--	NC	--	NC	lung	--	8.0E-05	--	8.0E-05
			Antimony	--	NC	--	NC	NF	--	NC	--	NC
			Aroclor-1242	--	1.2E-10	--	1.2E-10	NF	--	NC	--	NC
			Aroclor-1248	--	3.1E-10	--	3.1E-10	NF	--	NC	--	NC
			Aroclor-1254	--	2.9E-10	--	2.9E-10	NF	--	NC	--	NC
			Arsenic	--	3.8E-13	--	3.8E-13	NF	--	NC	--	NC
			Barium	--	NC	--	NC	respiratory, blood pressure	--	2.0E-06	--	2.0E-06
			Benzo(a)anthracene	--	1.7E-11	--	1.7E-11	NF	--	NC	--	NC
			Benzo(a)pyrene	--	1.0E-10	--	1.0E-10	NF	--	NC	--	NC
			Benzo(b)fluoranthene	--	5.7E-12	--	5.7E-12	NF	--	NC	--	NC
			Benzo(k)fluoranthene	--	4.5E-13	--	4.5E-13	NF	--	NC	--	NC
			Bis(2-ethylhexyl)phthalate	--	1.2E-11	--	1.2E-11	NF	--	NC	--	NC
			Cadmium	--	4.6E-13	--	4.6E-13	NF	--	NC	--	NC

TABLE 8.6a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Air	Any Exposure Unit 1 location	Chromium	--	3.7E-11	--	3.7E-11	respiratory	--	6.5E-06	--	6.5E-06
			Chrysene	--	6.8E-13	--	6.8E-13	NF	--	NC	--	NC
			Copper	--	NC	--	NC	NF	--	NC	--	NC
			Cyanide, total	--	NC	--	NC	NF	--	NC	--	NC
			Iron	--	NC	--	NC	NF	--	NC	--	NC
			Lead	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC	CNS	--	6.9E-05	--	6.9E-05
			Mercury	--	NC	--	NC	CNS	--	7.6E-01	--	7.6E-01
			Naphthalene	--	NC	--	NC	nasal	--	8.9E-03	--	8.9E-03
			Nickel	--	NC	--	NC	NF	--	NC	--	NC
			Tetrachloroethene	--	3.5E-10	--	3.5E-10	NF	--	5.2E-05	--	5.2E-05
			Thallium	--	NC	--	NC	NF	--	NC	--	NC
			Toxaphene	--	1.3E-10	--	1.3E-10	NF	--	NC	--	NC
			Trichloroethene	--	2.1E-08	--	2.1E-08	NF	--	1.1E-03	--	1.1E-03
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC
			(Total)	--	2.2E-08	--	2.2E-08	(Total)	--	7.7E-01	--	7.7E-01
Total Risk Across Surface Soil				1.5E-07	Total Hazard Index Across Surface Soil					1.6E+00		
Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 location	Aroclor 1242	7.3E-08	--	1.1E-08	8.4E-08	immunologic	1.5E-01	--	2.3E-02	1.8E-01
			Aroclor 1248	5.6E-09	--	8.4E-10	6.4E-09	immunologic	1.2E-02	--	1.8E-03	1.3E-02
			Aroclor 1254	5.6E-09	--	8.4E-10	6.4E-09	immunologic	1.2E-02	--	1.8E-03	1.3E-02
			Arsenic	5.7E-08	--	7.6E-10	5.7E-08	skin	2.6E-02	--	3.6E-04	2.7E-02
			Benzo(a)anthracene	6.5E-09	--	1.7E-09	8.2E-09	NF	NC	--	NC	NC
			Benzo(a)pyrene	3.6E-08	--	9.4E-09	4.6E-08	lung	NC	--	NC	NC
			Benzo(b)fluoranthene	5.5E-09	--	1.4E-09	7.0E-09	lung	NC	--	NC	NC
			Benzo(k)fluoranthene	4.8E-10	--	1.2E-10	6.1E-10	NF	NC	--	NC	NC
			Chromium	NC	--	NC	NC	NOAEL	8.0E-03	--	7.9E-03	1.6E-02
			Chrysene	5.8E-11	--	1.5E-11	7.3E-11	NF	NC	--	NC	NC
			Dichloroethene, 1,1-	1.5E-09	--	1.9E-10	1.7E-09	CNS, liver	5.7E-05	--	7.3E-06	6.5E-05
			Dichloroethene, cis-1,2-	NC	--	NC	NC	blood	5.5E-06	--	8.7E-07	6.3E-06
			Indeno(1,2,3-cd)pyrene	4.2E-09	--	1.1E-09	5.3E-09	NF	NC	--	NC	NC
			Iron	NC	--	NC	NC	GI	2.8E-01	--	4.2E-02	3.2E-01
			Tetrachloroethene	5.9E-08	--	7.5E-09	6.6E-08	CNS, liver	2.4E-03	--	3.0E-04	2.7E-03
			Thallium	NC	--	NC	NC	CNS	3.2E-01	--	2.0E-02	3.4E-01
			Toluene	NC	--	NC	NC	liver, kidney	7.2E-05	--	9.3E-06	8.2E-05
			Trichloroethene	1.8E-07	--	2.4E-08	2.1E-07	CNS, kidney	3.2E-01	--	4.3E-02	3.6E-01
			(Total)	4.3E-07	NC	5.9E-08	4.9E-07	(Total)	1.1E+00	--	1.4E-01	1.3E+00

TABLE 8.6a RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Subsurface Soil	Air	Any Exposure Unit 1 location	Aroclor 1242	--	3.5E-20	--	3.5E-20	NF	--	NC	--	NC		
			Aroclor 1248	--	2.7E-21	--	2.7E-21	NF	--	NC	--	NC		
			Aroclor 1254	--	2.7E-21	--	2.7E-21	NF	--	NC	--	NC		
			Arsenic	--	5.0E-13	--	5.0E-13	NF	--	NC	--	NC		
			Benzo(a)anthracene	--	3.9E-22	--	3.9E-22	NF	--	NC	--	NC		
			Benzo(a)pyrene	--	8.4E-22	--	8.4E-22	NF	--	NC	--	NC		
			Benzo(b)fluoranthene	--	6.9E-23	--	6.9E-23	NF	--	NC	--	NC		
			Benzo(k)fluoranthene	--	6.8E-24	--	6.8E-24	NF	--	NC	--	NC		
			Chromium	--	2.8E-11	--	2.8E-11	respiratory	--	4.9E-06	--	4.9E-06		
			Chrysene	--	1.2E-23	--	1.2E-23		NF	--	NC	--	NC	
			Dichloroethene, 1,1-	--	4.0E-19	--	4.0E-19		NF	--	NC	--	NC	
			Dichloroethene, cis-1,2-	--	NC	--	NC		NF	--	NC	--	NC	
			Indeno(1,2,3-cd)pyrene	--	4.2E-23	--	4.2E-23		NF	--	NC	--	NC	
			Iron	--	NC	--	NC		NF	--	NC	--	NC	
			Tetrachloroethene	--	4.6E-18	--	4.6E-18		NF	--	7.0E-13	--	7.0E-13	
			Thallium	--	NC	--	NC		NF	--	NC	--	NC	
			Toluene	--	NC	--	NC	neurological	--	4.2E-14	--	4.2E-14		
			Trichloroethene	--	9.1E-17	--	9.1E-17		NF	--	4.8E-12	--	4.8E-12	
			(Total)	--	2.9E-11	--	2.9E-11		(Total)	--	4.9E-06	--	4.9E-06	
Total Risk Across Subsurface Soil									Total Hazard Index Across Subsurface Soil			1.3E+00		
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	1.8E-07	--	1.8E-07	blood, CNS	--	8.2E-01	--	8.2E-01		
			Vinyl chloride	--	1.1E-08	--	1.1E-08		NF	--	5.4E-03	--	5.4E-03	
			(Total)	--	1.9E-07	--	1.9E-07		(Total)	--	8.3E-01	--	8.3E-01	
Total Risk Across Landfill Gas									Total Hazard Index Across Landfill Gas			8.3E-01		
Total Risk Across All Media and All Routes									Total Hazard Index Across All Media and All Routes			3.7E+00		
									Total GI HI =	7.2E-01				
									Total CNS HI =	2.5E+00				
NOAEL No Observed Adverse Effect Level														

TABLE 8.6b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI, kidney	1.8E-01	--	2.7E-02	2.0E-01
			Manganese	NC	--	NC	NC		3.5E-03	--	1.1E-03	4.6E-03
			Thallium	NC	--	NC	NC		2.1E-02	--	1.3E-03	2.2E-02
			Vanadium	NC	--	NC	NC		2.1E-02	--	1.0E-02	3.1E-02
			(Total)	NC	--	NC	NC		(Total)	2.2E-01	--	3.9E-02
	Air	Any Exposure Unit 2 location	Iron	--	NC	--	NC	NF	--	NC	--	NC
			Manganese	--	NC	--	NC		--	3.0E-05	--	3.0E-05
			Thallium	--	NC	--	NC		--	NC	--	NC
			Vanadium	--	NC	--	NC		--	NC	--	NC
			(Total)	--	NC	--	NC		(Total)	--	3.0E-05	--
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					2.6E-01		
Subsurface Soil	Subsurface Soil	Any Exposure Unit 2 location	Arsenic	9.0E-08	--	1.2E-09	9.1E-08	skin	4.2E-02	--	5.7E-04	4.3E-02
				(Total)	9.0E-08	--	1.2E-09		4.2E-02	--	5.7E-04	4.3E-02
	Air	Any Exposure Unit 2 location	Arsenic	--	7.9E-13	--	7.9E-13	NF	--	NC	--	NC
	(Total)	--	7.9E-13	--	7.9E-13	(Total)	--	NC	--	NC		
Total Risk Across Subsurface Soil				9.1E-08	Total Hazard Index Across Subsurface Soil					4.3E-02		
Sediment	Sediment	Any Exposure Unit 2 location	Aluminum Antimony Aroclor-1248 Aroclor-1254 Arsenic Barium Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chromium Chrysene Iron Manganese Mercury Thallium Vanadium	NC	--	NC	NC	CNS	3.3E-03	--	1.1E-03	4.3E-03
				NC	--	NC	NC	blood	1.4E-03	--	1.8E-03	3.2E-03
				6.4E-11	--	9.0E-12	7.3E-11	immunologic	1.3E-04	--	2.0E-05	1.5E-04
				6.0E-11	--	9.0E-12	6.9E-11	immunologic	1.3E-04	--	1.9E-05	1.4E-04
				3.1E-09	--	4.2E-11	3.2E-09	skin	1.5E-03	--	2.0E-05	1.5E-03
				NC	--	NC	NC	cardiovascular	1.9E-03	--	4.8E-04	2.4E-03
				9.9E-11	--	2.6E-11	1.3E-10	NF	NC	--	NC	NC
				1.1E-09	--	2.7E-10	1.3E-09	lung	NC	--	NC	NC
				1.1E-10	--	2.7E-11	1.3E-10	lung	NC	--	NC	NC
				9.3E-12	--	2.4E-12	1.2E-11	NF	NC	--	NC	NC
				NC	--	NC	NC	NOAEL	4.1E-04	--	4.0E-04	8.1E-04
				1.1E-12	--	2.9E-13	1.4E-12	NF	NC	--	NC	NC
				NC	--	NC	NC	GI	1.5E-02	--	2.3E-03	1.7E-02
				NC	--	NC	NC	CNS	1.0E-03	--	3.3E-04	1.4E-03
				NC	--	NC	NC	development, CNS	2.6E-04	--	3.3E-05	2.9E-04
				NC	--	NC	NC	CNS	8.7E-03	--	5.6E-04	9.3E-03
				NC	--	NC	NC	GI, kidney	1.7E-03	--	8.2E-04	2.5E-03
				(Total)	4.5E-09	--	3.9E-10	(Total)	3.5E-02	--	7.8E-03	4.3E-02

TABLE 8.6b RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Sediment	Air	Any Exposure Unit 2 location	Aluminum	--	NC	--	NC	lung	--	2.9E-06	--	2.9E-06		
			Antimony	--	NC	--	NC	NF	--	NC	--	NC		
			Aroclor-1248	--	3.6E-12	--	3.6E-12	NF	--	NC	--	NC		
			Aroclor-1254	--	3.4E-12	--	3.4E-12	NF	--	NC	--	NC		
			Arsenic	--	2.8E-14	--	2.8E-14	NF	--	NC	--	NC		
			Barium	--	NC	--	NC	respiratory, blood pressure	8.1E-08	--	8.1E-08	8.1E-08		
			Benzo(a)anthracene	--	6.9E-13	--	6.9E-13			NC	--	NC		
			Benzo(a)pyrene	--	2.9E-12	--	2.9E-12			NC	--	NC		
			Benzo(b)fluoranthene	--	1.6E-13	--	1.6E-13			NC	--	NC		
			Benzo(k)fluoranthene	--	1.5E-14	--	1.5E-14			NC	--	NC		
			Chromium	--	1.4E-12	--	1.4E-12	respiratory	2.5E-07	--	2.5E-07	2.5E-07		
			Chrysene	--	2.7E-14	--	2.7E-14			NC	--	NC		
			Iron	--	NC	--	NC			NC	--	NC		
			Manganese	--	NC	--	NC			8.9E-06	--	8.9E-06		
			Mercury	--	NC	--	NC			4.3E-03	--	4.3E-03		
			Thallium	--	NC	--	NC	NF	--	NC	--	NC		
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC		
			(Total)	--	1.2E-11	--	1.2E-11	(Total)	--	4.3E-03	--	4.3E-03		
Total Risk Across Sediment								4.9E-09	Total Hazard Index Across Sediment					4.8E-02
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	1.8E-07	--	1.8E-07	blood, CNS NF	-- -- --	8.2E-01	--	8.2E-01		
			Vinyl chloride	--	1.1E-08	--	1.1E-08			5.4E-03	--	5.4E-03		
			(Total)	--	1.9E-07	--	1.9E-07			8.3E-01	--	8.3E-01		
Total Risk Across Landfill Gas								1.9E-07	Total Hazard Index Across Landfill Gas					8.3E-01
Total Risk Across All Media and All Routes								2.9E-07	Total Hazard Index Across All Media and All Routes					1.2E+00
													Total GI HI =	2.5E-01
													Total CNS HI =	8.7E-01

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

NOAEL No Observed Adverse Effect Level.

TABLE 8.7 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Groundwater	Groundwater	Any Exposure Unit 1 or 2 location	Aluminum	NC	--	NC	NC	CNS	4.8E-05	--	6.0E-04	6.4E-04	
			Antimony	NC	--	NC	NC	blood	3.9E-04	--	1.9E-02	2.0E-02	
			Arsenic	6.7E-08	--	3.5E-08	1.0E-07	skin	4.2E-04	--	2.2E-04	6.4E-04	
			Barium	NC	--	NC	NC	cardiovascular	9.7E-05	--	9.7E-04	1.1E-03	
			Benzene	1.1E-08	--	1.2E-07	1.3E-07	CNS, blood	1.8E-04	--	2.1E-03	2.3E-03	
			Bis(2-ethylhexyl)phthalate	5.0E-08	--	5.4E-08	1.0E-07	NF	NC	--	NC	NC	
			Bromodichloromethane	1.4E-10	--	4.1E-10	5.5E-10	kidney	3.1E-07	--	9.3E-07	1.2E-06	
			Carbon tetrachloride	2.3E-09	--	3.0E-08	3.2E-08	liver	7.2E-05	--	9.3E-04	1.0E-03	
			Chlorobenzene	NC	--	NC	NC	liver	9.5E-06	--	6.3E-04	6.4E-04	
			Chloroethane	4.0E-10	--	2.0E-09	2.4E-09	NF	9.6E-07	--	4.8E-06	5.7E-06	
			Chloroform	NC	--	NC	NC	liver	3.1E-05	--	1.4E-04	1.7E-04	
			Chromium	NC	--	NC	NC	NOAEL	6.5E-05	--	2.5E-03	2.6E-03	
			Cobalt	NC	--	NC	NC	NF	4.0E-05	--	8.0E-05	1.2E-04	
			Dichlorobenzene, 1,4-	1.8E-09	--	5.5E-08	5.7E-08	NF	6.9E-06	--	2.1E-04	2.2E-04	
			Dichlorethane, 1,1-	NC	--	NC	NC	NOAEL	1.3E-05	--	7.4E-05	8.7E-05	
			Dichlorethane, 1,2-	1.1E-08	--	2.9E-08	4.0E-08	CNS, liver	1.1E-05	--	3.0E-05	4.1E-05	
			Dichloroethene, 1,1-	9.8E-08	--	7.8E-07	8.8E-07	CNS, liver	5.1E-05	--	4.1E-04	4.6E-04	
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	1.0E-03	--	6.4E-03	7.4E-03	
			Dichloroethene, 1,2- (trans)	NC	--	NC	NC	liver	4.9E-06	--	3.1E-05	3.5E-05	
			Iron	NC	--	NC	NC	GI	4.3E-04	--	2.5E-03	3.0E-03	
			Manganese	NC	--	NC	NC	CNS	3.6E-03	--	4.5E-02	4.9E-02	
			Methyl tert butyl ether	NC	--	NC	NC	NF	1.3E-05	--	2.0E-05	3.3E-05	
			Tetrachloroethane, 1,1,2,2-	2.7E-08	--	1.5E-07	1.8E-07	NF	6.3E-06	--	3.5E-05	4.2E-05	
			Tetrachloroethene	5.1E-08	--	1.2E-06	1.3E-06	CNS, liver	2.7E-04	--	6.6E-03	6.8E-03	
			Thallium	NC	--	NC	NC	CNS	2.6E-03	--	6.5E-03	9.1E-03	
			Trichloroethane, 1,1,1-	NC	--	NC	NC	CNS	6.4E-06	--	5.5E-05	6.1E-05	
			Trichloroethene	1.2E-06	--	9.9E-06	1.1E-05	CNS, kidney	2.7E-02	--	2.3E-01	2.6E-01	
			Vanadium	NC	--	NC	NC	GI, kidney	1.4E-05	--	2.7E-04	2.9E-04	
			Vinyl chloride	2.1E-07	--	8.8E-07	1.1E-06	CNS	2.6E-04	--	1.1E-03	1.4E-03	
(Total)				1.7E-06	--	1.3E-05	1.5E-05		(Total)	3.7E-02	--	3.3E-01	3.6E-01

TABLE 8.7 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Groundwater	Air	Any Exposure Unit 1 or 2 location	Aluminum	--	NC	--	NC	lung	--	NC	--	NC	
			Antimony	--	NC	--	NC	NF	--	NC	--	NC	
			Arsenic	--	NC	--	NC	NF	--	NC	--	NC	
			Barium	--	NC	--	NC	respiratory, blood pressure	--	NC	--	NC	
			Benzene	--	3.2E-08	--	3.2E-08		blood, CNS	--	1.9E-03	--	1.9E-03
			Bis(2-ethylhexyl)phthalate	--	2.1E-10	--	2.1E-10	NF	--	NC	--	NC	
			Bromodichloromethane	--	NC	--	NC	NF	--	NC	--	NC	
			Carbon tetrachloride	--	6.9E-09	--	6.9E-09	NF	--	6.4E-04	--	6.4E-04	
			Chlorobenzene	--	NC	--	NC	NF	--	6.5E-05	--	6.5E-05	
			Chloroethane	--	NC	--	NC	development	--	9.1E-07	--	9.1E-07	
			Chloroform	--	5.5E-08	--	5.5E-08		NF	--	2.2E-02	--	2.2E-02
			Chromium	--	NC	--	NC	respiratory	--	NC	--	NC	
			Cobalt	--	NC	--	NC	NF	--	NC	--	NC	
			Dichlorobenzene, 1,4-	--	8.9E-09	--	8.9E-09	liver	--	4.9E-06	--	4.9E-06	
			Dichloroethane, 1,1-	--	NC	--	NC		NF	--	6.0E-05	--	6.0E-05
			Dichloroethane, 1,2-	--	6.4E-08	--	6.4E-08	CNS, kidney, liver	--	1.4E-03	--	1.4E-03	
			Dichloroethene, 1,1-	--	2.0E-07	--	2.0E-07		NF	--	NC	--	NC
			Dichloroethene, 1,2- (cis)	--	NC	--	NC	NF	--	NC	--	NC	
			Dichloroethene, 1,2- (trans)	--	NC	--	NC	NF	--	NC	--	NC	
			Iron	--	NC	--	NC	NF	--	NC	--	NC	
			Manganese	--	NC	--	NC	CNS	--	NC	--	NC	
			Methyl tert butyl ether	--	NC	--	NC		kidney, liver	--	2.7E-06	--	2.7E-06
			Tetrachloroethane, 1,1,2,2-	--	1.2E-07	--	1.2E-07	NF	--	NC	--	NC	
			Tetrachloroethene	--	5.6E-08	--	5.6E-08	NF	--	1.1E-04	--	1.1E-04	
			Thallium	--	NC	--	NC	NF	--	NC	--	NC	
			Trichloroethane, 1,1,1-	--	NC	--	NC	NF	--	1.7E-05	--	1.7E-05	
			Trichloroethene	--	7.0E-06	--	7.0E-06	NF	--	4.9E-03	--	4.9E-03	
			Vanadium	--	NC	--	NC	NF	--	NC	--	NC	
			Vinyl chloride	--	1.1E-08	--	1.1E-08	NF	--	6.8E-05	--	6.8E-05	
			(Total)	--	7.6E-06	--	7.6E-06	(Total)	--	3.1E-02	--	3.1E-02	
Total Risk Across Groundwater				2.3E-05	Total Hazard Index Across Groundwater					4.0E-01			
Landfill Gas	Air	Any Exposure Unit 1 or 2 location	Benzene	--	4.4E-07	--	4.4E-07	blood, CNS NF	--	2.6E-02	--	2.6E-02	
			Vinyl chloride	--	2.7E-08	--	2.7E-08		--	1.7E-04	--	1.7E-04	
			(Total)	--	4.7E-07	--	4.7E-07		--	2.6E-02	--	2.6E-02	
Total Risk Across Landfill Gas				4.7E-07	Total Hazard Index Across Landfill Gas					2.6E-02			
Total Risk Across All Media and All Routes				2.3E-05	Total Hazard Index Across All Media and All Routes					4.2E-01			

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

Table 9 Series
Risk Assessment Summary

TABLE 9.1a RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	2.2E-06	--	2.2E-06	(Total)	--	2.2E-06	--	2.2E-06
								(Total)	--	--	--	--
Total Risk Across Landfill Gas					2.2E-06		Total Hazard Index Across Landfill Gas					

TABLE 9.1b RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future Receptor Population: Commercial Worker Receptor Age: Adult												
Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	2.2E-06	--	2.2E-06	(Total)	--	2.2E-06	--	2.2E-06
				Total Risk Across Landfill Gas				2.2E-06	Total Hazard Index Across Landfill Gas			

TABLE 9.2a RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aluminum	NC	--	NC	NC	CNS	6.1E-01	--	2.6E-02	6.4E-01
			Aroclor-1248	NC	--	NC	NC	immunologic	1.9E-01	--	3.9E-03	2.0E-01
			Aroclor-1254	NC	--	NC	NC	immunologic	1.8E-01	--	3.6E-03	1.8E-01
			Arsenic	NC	--	NC	NC	skin	1.3E-01	--	2.4E-04	1.3E-01
			Barium	NC	--	NC	NC	cardiovascular	3.0E-01	--	1.0E-02	3.2E-01
			Cadmium	NC	--	NC	NC	kidney	1.2E-01	--	4.5E-03	1.2E-01
			Chromium	NC	--	NC	NC	NOAEL	4.7E-01	--	6.2E-02	5.3E-01
			Iron	NC	--	NC	NC	GI	2.0E+00	--	4.0E-02	2.0E+00
			Manganese	NC	--	NC	NC	CNS	3.7E-01	--	1.6E-02	3.9E-01
			Mercury	NC	--	NC	NC	development, CNS	3.1E-01	--	5.3E-03	3.1E-01
			Thallium	NC	--	NC	NC	CNS	1.7E-01	--	1.4E-03	1.7E-01
			Vanadium	NC	--	NC	NC	Gl, kidney	2.7E-01	--	1.8E-02	2.9E-01
			(Total)	NC	--	NC	NC	(Total)	5.1E+00	--	1.9E-01	5.3E+00
				NC	--	NC	NC					
Surface Soil	Air	Any Exposure Unit 1 location	Mercury	--	NC	--	NC	CNS	--	2.0E+00	--	2.0E+00
			(Total)	--	NC	--	NC	(Total)	--	2.0E+00	--	2.0E+00
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					7.3E+00		
Groundwater	Groundwater	Any Exposure Unit 1 location	Aluminum	NC	--	NC	NC	CNS	1.2E-01	--	NC	1.2E-01
			Antimony	NC	--	NC	NC	blood	9.9E-01	--	NC	9.9E-01
			Arsenic	NC	--	NC	NC	skin	1.1E+00	--	NC	1.1E+00
			Barium	NC	--	NC	NC	cardiovascular	2.5E-01	--	NC	2.5E-01
			Benzene	NC	--	NC	NC	CNS, blood	4.6E-01	--	4.6E-01	9.1E-01
			Carbon tetrachloride	NC	--	NC	NC	liver	1.8E-01	--	1.8E-01	3.7E-01
			Chloroform	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Chromium	NC	--	NC	NC	NOAEL	1.7E-01	--	NC	1.7E-01
			Cobalt	NC	--	NC	NC	NF	1.0E-01	--	NC	1.0E-01
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	1.3E-01	--	1.3E-01	2.6E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	2.6E+00	--	2.6E+00	5.2E+00
			Iron	NC	--	NC	NC	GI	1.1E+00	--	NC	1.1E+00
			Manganese	NC	--	NC	NC	CNS	9.3E+00	--	NC	9.3E+00
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	7.0E-01	--	7.0E-01	1.4E+00
			Thallium	NC	--	NC	NC	CNS	6.6E+00	--	NC	6.6E+00
			Trichloroethene	NC	--	NC	NC	CNS, kidney	7.0E+01	--	7.0E+01	1.4E+02
			Vinyl chloride	NC	--	NC	NC	CNS	6.7E-01	--	6.7E-01	1.3E-00
			(Total)	NC	--	NC	NC	(Total)	9.4E+01	--	7.4E+01	1.7E-02
Total Risk Across Groundwater				NC	Total Hazard Index Across Groundwater					1.7E-02		
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	NC	--	NC	blood, CNS	--	2.2E+00	--	2.2E+00
			(Total)	--	NC	--	N/A	(Total)	--	2.2E+00	--	2.2E+00
Total Risk Across Landfill Gas				NC	Total Hazard Index Across Landfill Gas					2.2E+00		
Total Risk Across All Media and All Routes				NC	Total Hazard Index Across All Media and All Routes					1.8E+02		

CNS Central Nervous System.
NF Not found.
GI Gastrointestinal tract.
NC Not calculated.
N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total GI HI =	3.4E+00
Total kidney HI =	1.4E-02
Total CNS HI =	1.6E+02
Total liver HI =	2.2E+00

TABLE 9.2b RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI, kidney	1.2E+00	--	2.4E-02	1.2E+00		
			Manganese	NC	--	NC	NC		1.6E-01	--	7.0E-03	1.7E-01		
		(Total)	Thallium	NC	--	NC	NC		1.4E-01	--	1.2E-03	1.4E-01		
			Vanadium	NC	--	NC	NC		1.4E-01	--	9.2E-03	1.5E-01		
			(Total)	NC	--	NC	NC		1.6E+00	--	4.1E-02	1.7E+00		
	Air	Any Exposure Unit 2 location						(Total)						
									--	--	--	NC		
		(Total)		--	--	--	NC		--	--	--			
Total Risk Across Surface Soil				NC	Total Hazard Index Across Surface Soil					1.7E+00				
Groundwater	Groundwater	Any Exposure Unit 2 location	Aluminum	NC	--	NC	NC	CNS	1.2E-01	--	NC	1.2E-01		
			Antimony	NC	--	NC	NC	blood	9.9E-01	--	NC	9.9E-01		
			Arsenic	NC	--	NC	NC	skin	1.1E+00	--	NC	1.1E+00		
			Barium	NC	--	NC	NC	cardiovascular	2.5E-01	--	NC	2.5E-01		
			Benzene	NC	--	NC	NC	CNS, blood	4.6E-01	--	4.6E-01	9.1E-01		
			Bis(2-ethylhexyl)phthalate	NC	--	NC	NC	NF	NC	--	NC	NC		
			Carbon tetrachloride	NC	--	NC	NC	liver	1.8E-01	--	1.8E-01	3.7E-01		
			Chloroform	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01		
			Chromium	NC	--	NC	NC	NOAEL	1.7E-01	--	NC	1.7E-01		
			Cobalt	NC	--	NC	NC	NF	1.0E-01	--	NC	1.0E-01		
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	1.3E-01	--	1.3E-01	2.6E-01		
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	2.6E+00	--	2.6E+00	5.2E+00		
			Iron	NC	--	NC	NC	GI	1.1E+00	--	NC	1.1E+00		
			Manganese	NC	--	NC	NC	CNS	9.3E+00	--	NC	9.3E+00		
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	7.0E-01	--	7.0E-01	1.4E+00		
			Thallium	NC	--	NC	NC	CNS	6.6E+00	--	NC	6.6E+00		
			Trichloroethene	NC	--	NC	NC	CNS, kidney	7.0E+01	--	7.0E+01	1.4E+02		
			Vinyl chloride	NC	--	NC	NC	CNS	6.7E-01	--	6.7E-01	1.3E+00		
			(Total)	NC	--	NC	NC	(Total)	9.4E+01	--	7.4E+01	1.7E+02		
Total Risk Across Groundwater				NC	Total Hazard Index Across Groundwater					1.7E+02				
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	NC	--	NC	blood, CNS	--	2.2E+00	--	2.2E+00		
			(Total)	--	NC	--	N/A	(Total)	--	2.2E+00	--	2.2E+00		
Total Risk Across Landfill Gas				NC	Total Hazard Index Across Landfill Gas					2.2E+00				
Total Risk Across All Media and All Routes				NC	Total Hazard Index Across All Media and All Routes					1.7E+02				

GI Gastrointestinal tract.
 CNS Central Nervous System.
 NC Not calculated.
 N/A Not applicable.
 NF Not found.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total GI HI =	1.2E+00
Total kidney HI =	1.4E+02
Total CNS HI =	1.6E+02
Total liver HI =	2.2E+00

TABLE 9.3a RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Iron	NC	--	NC	NC	GI	2.1E-01	--	2.2E-02	2.3E-01
				(Total)	NC	--	NC	(Total)	2.1E-01	--	2.2E-02	2.3E-01
	Air	Any Exposure Unit 1 location	Mercury	--	NC	--	NC	CNS	--	7.0E-01	--	7.0E-01
				(Total)	--	NC	--	(Total)	--	7.0E-01	--	7.0E-01
Total Risk Across Surface Soil							NC	Total Hazard Index Across Surface Soil				9.3E-01
Groundwater	Groundwater	Any Exposure Unit 1 location	Antimony	NC	--	NC	NC	blood	4.2E-01	--	NC	4.2E-01
			Arsenic	NC	--	NC	NC	skin	4.6E-01	--	NC	4.6E-01
			Barium	NC	--	NC	NC	cardiovascular	1.1E-01	--	NC	1.1E-01
			Benzene	NC	--	NC	NC	CNS, blood	2.0E-01	--	2.0E-01	3.9E-01
			Carbon tetrachloride	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	5.6E-02	--	5.6E-02	1.1E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	CNS, liver	1.1E+00	--	1.1E+00	2.2E+00
			Iron	NC	--	NC	NC	liver	4.7E-01	--	NC	4.7E-01
			Manganese	NC	--	NC	NC	GI	4.0E+00	--	NC	4.0E+00
			Tetrachloroethene	NC	--	NC	NC	NF	3.0E-01	--	3.0E-01	6.0E-01
			Thallium	NC	--	NC	NC	CNS, liver	2.8E+00	--	NC	2.8E+00
			Trichloroethene	NC	--	NC	NC	CNS	3.0E+01	--	3.0E+01	6.0E+01
			Vinyl chloride	NC	--	NC	NC	GI, kidney	2.9E-01	--	2.9E-01	5.7E-01
			(Total)	NC	--	NC	NC	(Total)	4.0E+01	--	3.2E+01	7.2E+01
Total Risk Across Groundwater							NC	Total Hazard Index Across Groundwater				7.2E+01
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene	--	NC	--	NC	blood, CNS	--	7.6E-01	--	7.6E-01
			(Total)	--	NC	--	N/A	(Total)	--	7.6E-01	--	7.6E-01
Total Risk Across Landfill Gas							NC	Total Hazard Index Across Landfill Gas				7.6E-01
Total Risk Across All Media and All Routes							NC	Total Hazard Index Across All Media and All Routes				7.4E+01

CNS Central Nervous System.

NOAEL No Observed Adverse Effect Level.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total GI HI =

4.2E+00

Total kidney HI =

5.7E-01

Total CNS HI =

6.7E+01

Total liver HI =

5.8E+00

TABLE 9.3b RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	1.3E-01	--	1.3E-02	1.4E-01
				(Total)	NC	--	NC	(Total)	1.3E-01	--	1.3E-02	1.4E-01
	Air	Any Exposure Unit 2 location						(Total)	--	--	--	NC
Total Risk Across Surface Soil								Total Hazard Index Across Surface Soil			1.4E-01	
Groundwater	Groundwater	Any Exposure Unit 2 location	Antimony	NC	--	NC	NC	blood	4.2E-01	--	NC	4.2E-01
			Arsenic	NC	--	NC	NC	skin	4.6E-01	--	NC	4.6E-01
			Barium	NC	--	NC	NC	cardiovascular	1.1E-01	--	NC	1.1E-01
			Benzene	NC	--	NC	NC	CNS, blood	2.0E-01	--	2.0E-01	3.9E-01
			Carbon tetrachloride	NC	--	NC	NC	liver	7.8E-02	--	7.8E-02	1.6E-01
			Dichloroethene, 1,1-	NC	--	NC	NC	CNS, liver	5.6E-02	--	5.6E-02	1.1E-01
			Dichloroethene, 1,2- (cis)	NC	--	NC	NC	blood	1.1E+00	--	1.1E+00	2.2E+00
			Iron	NC	--	NC	NC	GI	4.7E-01	--	NC	4.7E-01
			Manganese	NC	--	NC	NC	CNS	4.0E+00	--	NC	4.0E+00
			Tetrachloroethene	NC	--	NC	NC	CNS, liver	3.0E-01	--	3.0E-01	6.0E-01
			Thallium	NC	--	NC	NC	CNS	2.8E+00	--	NC	2.8E+00
			Trichloroethene	NC	--	NC	NC	CNS, kidney	3.0E+01	--	3.0E+01	6.0E+01
			Vinyl chloride	NC	--	NC	NC	CNS	2.9E-01	--	2.9E-01	5.7E-01
			(Total)	NC	--	NC	NC	(Total)	4.0E+01	--	3.2E+01	7.2E+01
Total Risk Across Groundwater								Total Hazard Index Across Groundwater			7.2E+01	
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	NC	--	NC	blood, CNS	--	7.6E-01	--	7.6E-01
			(Total)	--	NC	--	N/A	(Total)	--	7.6E-01	--	7.6E-01
Total Risk Across Landfill Gas								Total Hazard Index Across Landfill Gas			7.6E-01	
Total Risk Across All Media and All Routes								Total Hazard Index Across All Media and All Routes			7.3E+01	

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" Hazard Quotients for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

Total CNS HI = 6.9E+01

Total kidney HI = 6.0E+01

Total liver HI = 8.6E-01

TABLE 9.4a RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Arsenic Benzo(a)pyrene	3.9E-06	--	2.7E-08	3.9E-06	skin lung	NC	--	NC	NC			
				3.5E-06	--	4.6E-07	4.0E-06		NC	--	NC	NC			
				(Total)	7.4E-06	--	4.9E-07	7.9E-06	(Total)	NC	--				
	Air	Any Exposure Unit 1 location	Trichloroethene	--	1.9E-06	--	1.9E-06	NF	--	NC	--	NC			
				(Total)	--	1.9E-06	--		(Total)	--	NC	--			
												NC			
Total Risk Across Surface Soil						9.8E-06		Total Hazard Index Across Surface Soil			NC				
Groundwater	Groundwater	Any Exposure Unit 1 location	Arsenic Benzene Bis(2-ethylhexyl)phthalate Carbon tetrachloride Chloroethane Dichlorobenzene, 1,4- Dichloroethane, 1,2- Dichloroethene, 1,1- Tetrachloroethane, 1,1,2,2- Tetrachloroethene Trichloroethene Vinyl chloride	9.4E-05	--	NC	9.4E-05	skin CNS, blood NF liver NF NF NF CNS, liver CNS, liver NF CNS, liver CNS, kidney CNS	NC	--	NC	NC			
				1.5E-05	--	1.5E-05	2.9E-05		NC	--	NC	NC			
				7.1E-05	--	7.1E-05	1.4E-04		NC	--	NC	NC			
				3.3E-06	--	3.3E-06	6.5E-06		NC	--	NC	NC			
				5.6E-07	--	5.6E-07	1.1E-06		NC	--	NC	NC			
				2.5E-06	--	2.5E-06	5.0E-06		NC	--	NC	NC			
				1.5E-05	--	1.5E-05	3.1E-05		NC	--	NC	NC			
				1.4E-04	--	1.4E-04	2.7E-04		NC	--	NC	NC			
				3.8E-05	--	3.8E-05	7.5E-05		NC	--	NC	NC			
				7.1E-05	--	7.1E-05	1.4E-04		NC	--	NC	NC			
				1.6E-03	--	1.6E-03	3.3E-03		NC	--	NC	NC			
				3.0E-04	--	3.0E-04	5.9E-04		NC	--	NC	NC			
				(Total)	2.4E-03	--	2.3E-03		(Total)	NC	--	NC			
Total Risk Across Groundwater						NC		Total Hazard Index Across Groundwater			NC				
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene Vinyl chloride	--	1.7E-05	--	1.7E-05	blood, CNS NF	--	NC	--	NC			
				--	1.0E-06	--	1.0E-06		--	NC	--	NC			
				(Total)	--	1.8E-05	--		(Total)	--	NC	--			
												N/A			
Total Risk Across Landfill Gas						1.8E-05		Total Hazard Index Across Landfill Gas			NC				
Total Risk Across All Media and All Routes						4.7E-03		Total Hazard Index Across All Media and All Routes			NC				

CNS Central Nervous System.
NOAEL No Observed Adverse Effect Level.
NF Not found.
GI Gastrointestinal tract.
NC Not calculated.
N/A Not applicable.

"Dermal" risks for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

TABLE 9.4b RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Aggregate

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Surface Soil	Surface Soil	Any Exposure Unit 2 location		(Total)	NC	--	NC	NC	(Total)	NC	--	NC			
	Air	Any Exposure Unit 2 location		(Total)	--	NC	--	NC		--	NC	--			
Total Risk Across Surface Soil								NC	Total Hazard Index Across Surface Soil			NC			
Groundwater	Groundwater	Any Exposure Unit 2 location	Arsenic Benzene Bis(2-ethylhexyl)phthalate Carbon tetrachloride Chloroethane Dichlorobenzene, 1,4- Dichloroethane, 1,2- Dichloroethene, 1,1- Tetrachloroethane, 1,1,2,2- Tetrachloroethene Trichloroethene Vinyl chloride	9.4E-05	--	NC	9.4E-05	skin	NC	--	NC	NC			
				1.5E-05	--	1.5E-05	2.9E-05	CNS, blood	NC	--	NC	NC			
				7.1E-05	--	7.1E-05	1.4E-04	NF	NC	--	NC	NC			
				3.3E-06	--	3.3E-06	6.5E-06	liver	NC	--	NC	NC			
				5.6E-07	--	5.6E-07	1.1E-06	NF	NC	--	NC	NC			
				2.5E-06	--	2.5E-06	5.0E-06	NF	NC	--	NC	NC			
				1.5E-05	--	1.5E-05	3.1E-05	CNS, liver	NC	--	NC	NC			
				1.4E-04	--	1.4E-04	2.7E-04	CNS, liver	NC	--	NC	NC			
				3.8E-05	--	3.8E-05	7.5E-05	NF	NC	--	NC	NC			
				7.1E-05	--	7.1E-05	1.4E-04	CNS, liver	NC	--	NC	NC			
				1.6E-03	--	1.6E-03	3.3E-03	CNS, kidney	NC	--	NC	NC			
				3.0E-04	--	3.0E-04	5.9E-04	CNS	NC	--	NC	NC			
(Total)								(Total)	NC	--	NC	NC			
Total Risk Across Groundwater								4.7E-03	Total Hazard Index Across Groundwater			NC			
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene Vinyl chloride	--	1.7E-05	--	1.7E-05	blood, CNS	--	NC	--	NC			
				--	1.0E-06	--	1.0E-06		--	NC	--	NC			
				(Total)	--	--	1.8E-05		--	NC	--	N/A			
Total Risk Across Landfill Gas								1.8E-05	Total Hazard Index Across Landfill Gas			NC			
Total Risk Across All Media and All Routes								4.7E-03	Total Hazard Index Across All Media and All Routes			NC			

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

N/A Not applicable.

"Dermal" risks for groundwater are the combined dermal and inhalation surrogate values as noted on Tables 7 and as discussed in Section 3.4.1.4 of the text.

TABLE 9.5a RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient									
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total					
Surface Soil	Surface Soil	Any Exposure Unit 1 location	Aluminum Iron (Total)	NC	--	NC	NC	CNS GI (Total)	9.1E-02 2.9E-01 3.8E-01	-- -- --	2.9E-02 4.4E-02 7.3E-02	1.2E-01 3.4E-01 4.6E-01					
				NC	--	NC	NC										
				NC	--	NC	NC										
	Air	Any Exposure Unit 1 location	Mercury (Total)	--	NC	--	NC	CNS (Total)	-- 7.6E-01	-- 7.6E-01	-- 7.6E-01	7.6E-01					
				--	NC	--	NC										
				--	NC	--	NC										
Total Risk Across Surface Soil								NC	Total Hazard Index Across Surface Soil			1.2E+00					
Subsurface Soil	Subsurface Soil	Any Exposure Unit 1 location	Aroclor 1242 Iron Thallium Trichloroethene (Total)	7.3E-08	--	1.1E-08	8.4E-08	immunologic GI CNS CNS, kidney (Total)	1.5E-01 2.8E-01 3.2E-01 3.2E-01 1.1E+00	-- -- -- -- --	2.3E-02 4.2E-02 2.0E-02 4.3E-02 1.3E-01	1.8E-01 3.2E-01 3.4E-01 3.6E-01 1.2E+00					
				NC	--	NC	NC										
				NC	--	NC	NC										
	Air	Any Exposure Unit 1 location	(Total)	1.8E-07	--	2.4E-08	2.1E-07										
				2.5E-07	NC	3.5E-08	2.9E-07										
				--	--	--	--	(Total)	-- -- -- --	-- -- -- --	-- -- -- --						
Total Risk Across Subsurface Soil								2.9E-07	Total Hazard Index Across Subsurface Soil			1.2E+00					
Landfill Gas	Air	Any Exposure Unit 1 location	Benzene (Total)	--	1.8E-07	--	1.8E-07	blood, CNS (Total)	-- 8.2E-01 8.2E-01	-- -- --	8.2E-01 8.2E-01						
				--	1.8E-07	--	1.8E-07										
Total Risk Across Landfill Gas								1.8E-07	Total Hazard Index Across Landfill Gas			8.2E-01					
Total Risk Across All Media and All Routes								4.7E-07	Total Hazard Index Across All Media and All Routes			3.2E+00					
Total GI HI = 6.6E-01																	
Total CNS HI = 2.4E+00																	

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

NOAEL No Observed Adverse Effect Level

TABLE 9.5b RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Surface Soil	Surface Soil	Any Exposure Unit 2 location	Iron	NC	--	NC	NC	GI	1.8E-01	--	2.7E-02	2.0E-01			
				(Total)	NC	--	NC		1.8E-01	--	2.7E-02	2.0E-01			
	Air	Any Exposure Unit 2 location						(Total)	--	NC	--	NC			
				(Total)	--	NC	--		--	NC	--	NC			
Total Risk Across Surface Soil							NC	Total Hazard Index Across Surface Soil							
Subsurface Soil	Subsurface Soil	Any Exposure Unit 2 location						(Total)							
				(Total)	NC	--	NC		NC	--	NC	NC			
	Air	Any Exposure Unit 2 location						(Total)	--	NC	--	NC			
				(Total)	--	NC	--		--	NC	--	NC			
Total Risk Across Subsurface Soil							NC	Total Hazard Index Across Subsurface Soil							
Sediment	Sediment	Any Exposure Unit 2 location						(Total)							
				(Total)	NC	--	NC		NC	--	NC	NC			
	Air	Any Exposure Unit 2 location						(Total)							
				(Total)	--	NC	--		--	NC	--	NC			
Total Risk Across Sediment							NC	Total Hazard Index Across Sediment							
Landfill Gas	Air	Any Exposure Unit 2 location	Benzene	--	1.8E-07	--	1.8E-07	blood, CNS	--	8.2E-01	--	8.2E-01			
				(Total)	--	1.8E-07	--		--	8.2E-01	--	8.2E-01			
								(Total)							
Total Risk Across Landfill Gas							1.8E-07	Total Hazard Index Across Landfill Gas							
Total Risk Across All Media and All Routes							1.8E-07	Total Hazard Index Across All Media and All Routes							

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.

NOAEL No Observed Adverse Effect Level.

Total GI HI =	2.0E-01
Total CNS HI =	8.2E-01

TABLE 9.6 RME
RISK ASSESSMENT SUMMARY
REASONABLE MAXIMUM EXPOSURE
AQUA-TECH SITE

Scenario Timeframe:	Future
Receptor Population:	Other Worker (Irrigation Maint)
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Any Exposure Unit 1 or 2 location	Tetrachloroethene	5.1E-08	--	1.2E-06	1.3E-06	CNS, liver CNS, kidney CNS	2.7E-04	--	6.6E-03	6.8E-03
			Trichloroethene	1.2E-06	--	9.9E-06	1.1E-05		2.7E-02	--	2.3E-01	2.6E-01
			Vinyl chloride	2.1E-07	--	8.8E-07	1.1E-06		2.6E-04	--	1.1E-03	1.4E-03
			(Total)	1.4E-06	--	1.2E-05	1.3E-05		2.8E-02	--	2.4E-01	2.7E-01
			Trichloroethene	--	7.0E-06	--	7.0E-06	NF	--	4.9E-03	--	4.9E-03
Groundwater	Air	Any Exposure Unit 1 or 2 location	(Total)	--	7.0E-06	--	7.0E-06	(Total)	--	4.9E-03	--	4.9E-03
			Total Risk Across Groundwater				2.0E-05	Total Hazard Index Across Groundwater				
			(Total)	--	NC	--	NC	(Total)	--	NC	--	NC
			Total Risk Across Landfill Gas	Total Risk Across All Media and All Routes				NC	Total Hazard Index Across Landfill Gas			
			2.0E-05	Total Hazard Index Across All Media and All Routes				NC	2.7E-01			

CNS Central Nervous System.

NF Not found.

GI Gastrointestinal tract.

NC Not calculated.